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Resident Physician

English for Foreign Residents

Alton City Hospital

Doctor, Plan to Write

Ethics and Etiquette

Military Service

Roundtable

Plastic Surgery and the Law

Otorhinolaryngology

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PRIVATE SERVICE
can the house staff
get adequate training
on a private service
page 6

**MEN WHO MADE
THE MEDICINE**
first of a new series
on pharmaceutical
pioneers
page 1

Journal for the Hospital Staff Officer

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Resident Physician

March 1958, Vol. 4, No. 3

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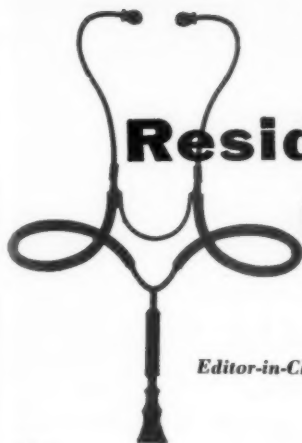
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Journal for the Hospital Staff Officer



Resident Physician

March 1958, Vol. 4, No. 3

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None	16%	22%	13%	19%
Few	46%	48%	50%	57%
Same	38%	38%	38%	24%
Complications:				
Hemorrhage	5%	7%	19%	9.5%
Perforation	0%	4%	0%	0%
Obstruction	0%	4%	0%	0%
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1. After Cayer, D.: Prolonged anticholinergic therapy of duodenal ulcer, *Am. J. Digest. Dis.* 1:301 (July) 1956.

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Viewbox Diagnosis

Edited by Maxwell H. Poppel, M.D., F.A.C.R.,
Professor of Radiology, New York University College of Medicine
and Director of Radiology, Bellevue Hospital Center



What Is Your Diagnosis?

- | | |
|--------------------|------------|
| 1. Congenital lues | 3. Rickets |
| 2. Cooley's anemia | 4. Scurvy |

Answer on page 226





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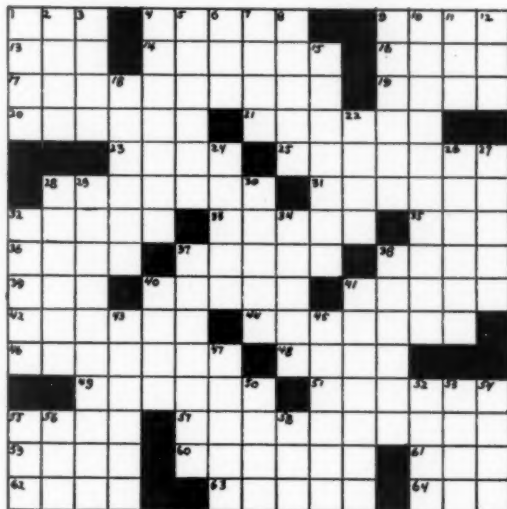
1. The yellowish substance of adipose tissue
4. Change to conform to new conditions
9. A soothing application
13. Of each
14. A variety of herpes
16. Prefix signifying equality (pl.)
17. Hernia of Descemet's membrane through the cornea
19. Constant modes of action of forces
20. Basophile elastin
21. Main arterial trunk (pl.)
23. A protection
25. Nonfermentable sugar from berries of *Pyrus aucuparia*
28. Efficacy
31. Pertaining to the spleen
32. Blackness (prefix)
33. Custom
35. Suffix used to form commercial and chemical names
36. West Indian shrub from which indigo is made
37. Tell a lie about: Colloq. (2 wds.)
38. Ultimate unit
39. Shortened slang name for a smoke
40. Molluscum contagiosum
41. Apparatus for holding a hernia in place
42. One who runs away secretly
44. Die
46. Conference
48. Fake
49. Malarial fever
51. Inserted: Fr. word from which supernumerary is derived
55. Circle around the female nipple
57. Pepsins changed by heat
59. Burden
60. Having much hair
61. Disease from alcoholic poisoning: Abbr.
62. Vascular pedicle of a flap
63. Looser
64. Acted upon by a synthetic enzyme (suffix)

DOWN

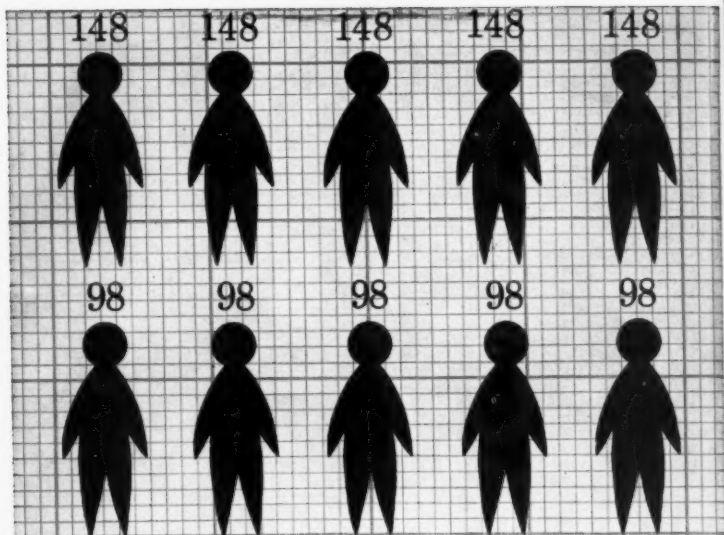
1. Physiognomy
2. —'s Operation for Aneurysm; ligation on the cardiac side close to the aneurysm
3. A nervous disease of Siberia
4. Antibody stimulant
5. Ethyl morphin hydrochlorate
6. Part of a circle.
7. Appeal

Resident Relaxer

(Answer on Page 226)



8. End (pl.) (comb. form)
9. Instrument for extracting vesical calculi through the urethra
10. Like a tinkling sound (3 wds.)
11. Depressed
12. Manuscripts (Abbr.)
15. Crystalline substance from blood serum
18. $\text{C}_6\text{H}_5\text{O}_2$
22. Powdered mixture of medicinal substance with lactose (Abbr.)
24. Split (comb. form)
26. Food preparation consisting of 80% of casein and 20% of albumose
27. Chemical substances (Abbr.)
28. Pertaining to male organ of copulation
29. Excessive congenital thinness of the limbs
30. An alkaloid from bark of *Andira excelsa*
32. Fleishy arils of nutmeg
34. Ossa
37. Pertaining to induced electric currents
38. Pleasant odors
40. When you are sick you can —good to anybody (2 wds.)
41. One who gathers pelts for a living
43. Hairy
45. Milk product
47. Wood-tar saponified with potash-lye
50. The body
52. Killing (Suffix)
53. Explosive (pl.)
54. Being
55. — nail Liver of Laennec's cirrhosis
56. Of each
58. Contagious, pustular, eruptive disease



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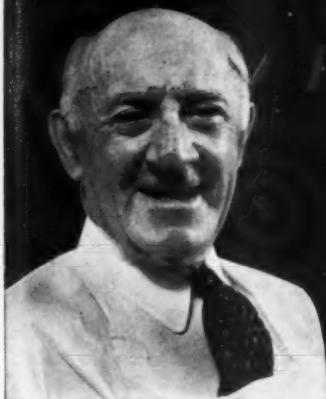
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Ford, R. V., and Mower, J. B., *Rauwiloid
Effective in the Treatment of Hypertension,
Postgrad Med*, 23:41 (Jan.) 1958.

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Letters to the Editor

*Unsigned letters will neither
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*However, at your request
your name will be withheld.*



Citizenship and Boards

I would greatly appreciate it if you would give me help in the following matter. I am a citizen of India and I am in this country as a permanent resident having declared my intention to become a citizen. It will, however, take five years before I become a citizen. I would like to possess a license to practice medicine and I am told that there are only a few states which will accept me for examination before I acquire my citizenship. I would like for you to give me a list of these states so that I can correspond with them independently.

M. R. Gaitonde, M.D.
Osawatomie State Hospital
Osawatomie, Kansas

As your magazine is the only one which discusses problems related to foreign medical graduates, I would like you to give me some information. I am a medical graduate of Bombay University, Bombay, India.

I was graduated in October 1954. Since then I worked for six months in a municipal clinic and was a general practitioner until June 1956. I came to the States in June and finished one year of residency in internal medicine. At present I am in residency in psychiatry. I have an earnest desire to appear for the Board examination but the information I gathered regarding the necessary requirements to be able to appear for such an examination are confusing; particularly regarding citizenship. I am a non-immigrant exchange visitor and hence am not a citizen of the States and I am not planning to be so. Now, under these circumstances, am I eligible for the Psychiatry Board Examination? Also, please send me information regarding all the other necessary conditions to be fulfilled before being eligible for the same.

M. T. Irani, M.D.
Columbus, Ohio

—Continued on page 28

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—Continued from page 26

• *The American Board of Psychiatry has no U. S. citizenship requirement as a condition for examination. On the other hand, the Board does state that the applicant must be licensed to practice in one of the states in the United States. As you may know, many of the 48 states require full citizenship or at least first papers for applicants. It is suggested that you correspond with the American Board of Psychiatry to verify the fact that, if you have a state license, you would be eligible for the Board regardless of your citizenship. Also, check our Foreign Licensure table (in the April issue) for those states which may permit licensure without requiring citizenship.*

Draft

I read with interest your article in the December 1957 issue on changes in the draft law. In accordance with your suggestion, I checked with my draft board and they have been unable to clarify my current status. I would appreciate it if you can be of help in this matter since other residents may have similar problems. I am 4F for physical reasons under the basic draft law. When the doctor draft law was in existence, I was found physically qualified due to the lower physical standards of this act. Consequently, I joined the Berry Plan for residency deferment. Is my continuation in this Plan affected in any

manner by Executive Order 10735 which, as I understand it, eliminates the separate doctor draft law? If this is so, can I resign my Berry Plan commission and thus revert back to my original 4F classification under the basic Selective Service law?

Name withheld at
writer's request

Milwaukee, Wisconsin

• *Whether a physician is under the Berry Plan or not, he will be classified for physical standards under the lower standards for doctors and dentists.*

Interest

I would appreciate it very much if you could send me RESIDENT PHYSICIAN regularly. I found a copy in the library a little while ago and found it to be of great interest. I would also like to receive a copy of the review of licensure requirements for foreign graduates you plan to make. Thanking you in advance.

K. Vandyk, M.D.

Johnston Willis Hospital
Richmond, Virginia

• *Licensure table will appear in the April issue.*

Address, Please

I receive your RESIDENT PHYSICIAN issues regularly. I am trying to find out the address of the Medical Board of North Carolina and the

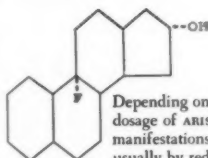
—Continued on page 34

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—Continued from page 28

requirements of the Board in North Carolina State. Will you please send me this information or the issue of *RESIDENT PHYSICIAN* in which it is published?

G. Ahmed, M.D.
Erie, Pennsylvania

• *Address of the North Carolina Board is 716 Professional Building, Raleigh, North Carolina.*

Preceptor Program

At the present time I am a resident in general surgery under the Group II plan, as approved by the American Board of Surgery, whereby three years of approved hospital training and two additional years of preceptorship under a preceptor acceptable to the American Board of Surgery is required. I would like to know whether or not there is available to the resident under the Group II plan a list of institutions and/or clinics which are acceptable to the Board as preceptors following the approved three years of hospital training.

Henry L. Jenkins, M.D.
Pontiac, Michigan

• *According to the Board, there is no formal list of approved preceptorships or hospitals for surgeons who wish to complete the Group II requirements. There is a list of hospitals (Page 551, JAMA, October 5, 1957) having programs approved by the Board for this purpose. These services are in surgical specialties*

and are acceptable to the Board following your completion of three years of approved residency to make a total of five years. Programs of all other Group II applicants who wish to complete their five years are considered on an individual basis. When the applicant's program is formulated the Board will then decide whether or not the planned training is acceptable.

Law Articles

I am a resident in pathology at the VA Hospital in Pittsburgh; I am also attending law school. The series of articles by Dr. George A. Friedman has recently been brought to my attention, but I have been successful in rounding up but four of the series. Could you possibly send me a copy of the February, March, April, May, June, July, October and November 1957 publications? I would be happy to pay any postage or other incidental expenses involved in the sending of these copies. I hope there are still some editions available.

Cyril H. Wecht, M.D.
VA Hospital
Pittsburgh, Pa.

• *Sorry. With the exception of October and November, copies of which are in the mail to you, our back issue supply is exhausted.*

Moving

I recall reading, about a year and

—Continued on page 40

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Philadelphia 1, Pa.



—Continued from page 34

a half ago, an article in the RESIDENT PHYSICIAN on the problems related to moving to distant places. I also recall thinking at that time that the article contained many valuable points of advice and I put that issue aside for future reference. I must have taken excessive care in preserving it from my wild children, as I can no longer locate it. I have also looked around my hospital but I have not been successful in locating this issue. Unfortunately, I don't recall the exact issue, title of the article, or the name of the author, except that he had been identified as an authority on moving problems. If you can recall the particular issue, and if you have any old copies, or a reprint of the article available, I would appreciate your sending me a copy. If you have a special charge for this, please let me know. I shall be finishing my residency in general surgery at Kings County Hospital, Brooklyn, in five more months and I feel that the advice contained in this back issue will be timely and helpful when I start making arrangements to move to the west coast, soon.

Augustus M. Tanaka, M.D.
Kings County Hospital
Brooklyn, N.Y.

• *We have sent you a copy of the article "Moving is Your Business" which was published in the May 1956 issue of RESIDENT PHYSICIAN.*

Jersey License

In your November '57 issue you gave the requirements of the State of New Jersey for Licensure for Foreign Graduates. I contacted the New Jersey Board of Medical Examiners and learned that there was an additional requirement for foreign graduates licensed in another state who wanted endorsement. This requirement was a license to practice medicine in the country where his M.D. was obtained.

Name withheld at
writer's request

Boston, Mass.

. . . Relative to your article on Licensure for Foreign Graduates, . . . your information states emphatically that reciprocity in New Jersey is extended to foreign medical graduates providing they meet certain requirements. On the basis of this article, I wrote to the New Jersey Board of Medical Examiners requesting further information and was most surprised to receive a reply advising that *no* reciprocity exists for graduates of foreign medical schools who are licensed in another state. In referring to foreign medical schools, I refer to those schools recommended by the American Medical Association. I shall appreciate your comments on this matter and if possible would you quote the source you used for the data you published in the November 1957 issue. I should also appreciate your

—Continued on page 44

POSTOPERATIVE PRACTICE TAKES ANOTHER STEP FORWARD

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—Continued from page 40

advice as to whether or not the information relative to licensure as published by your journal is based on actual confirmed, authentic data as received by you from the various state licensing agencies involved.

K. T. S., M.D.

Brooklyn, N. Y.

• *Please understand that our original source of information is based on direct correspondence with the various State Boards. We received a "yes" answer from the New Jersey State Board of Examiners in answer to our question: "Do you extend reciprocity to those graduates of foreign medical schools who are licensed in other states? On the same basis as United States graduates licensed in other states? If not, what is the distinction?" On the basis of an affirmative reply we prepared the information contained in our November issue. However, our most recent correspondence with the State Board of New Jersey, which was stimulated by your letters, brought us the following reply:*

" . . . Regarding licensure for graduates of foreign medical schools to practice in this state:

1) Full citizenship in the United States of America is a requisite.

2) Original diploma and translations must be seen.

3) Original course books and translations must be seen.

4) Original license to practice medicine in a foreign country must

be seen with translations.

5) A qualifying medical student certificate must be obtained from the N. J. Department of Education (department for evaluating foreign, academic credentials), Dr. Everett Preston, Director, 106 W. State St., Trenton, N. J.

6) Verification of graduates from the foreign medical school is made by this office.

"I am enclosing a list of foreign medical schools registered with this Board. (Ed. Note: List is not published here. May be obtained directly from the New Jersey State Board of Medical Examiners.) If a graduate from one of these schools complies with all of the above, then he needs only one year of an approved rotating internship in a hospital in this country. If this graduate complies with 1-6 above, he can either sit for examination or have the license of another state in this country endorsed by this State. This is, providing the marks he obtains in that State Board Examination meet the requirements of the State of New Jersey (must have a mark of 75% or better in every subject). If the individual complies with 1-6 above, minus the foreign license, he must then spend three years in American hospitals, approved for intern and/or residency training and in addition, must sit for examination for licensure to practice in this State, as endorsement is not possible under this condition. (Ed. Note: Ap-

—Continued on page 48



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Indications — Acute back pain associated with: (a) muscle spasm secondary to sprain; (b) muscle spasm due to trauma; (c) muscle spasm due to nerve irritation; (d) muscle spasm secondary to discogenic disease and postoperative orthopedic procedures; and miscellaneous conditions, such as bursitis, fibrositis, torticollis, etc.

Dosage — *Adults*: Two tablets 4 times daily to 3 tablets every 4 hours. Total daily dosage: 4 to 9 Gm. in divided doses.

Precautions — There are no specific contraindications to Robaxin and untoward reactions are not to be anticipated. Minor side effects such as light-

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Supply — Robaxin Tablets, 0.5 Gm., in bottles of 50.

References: 1. Carpenter, E. B.: Publication pending. 2. Carter, C. H.: Personal communication. 3. Forsyth, H. F.: Publication pending. 4. Freund, J.: Personal communication. 5. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: *American Pharm. Assn.* 46:374, 1957. 6. Nachman, H. M.: Personal communication. 7. O'Doherty, D.: Publication pending. 8. Truitt, E. B., Jr., and Little, J. M.: *J. Pharm. & Exper. Therap.* 119:161, 1957.

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WARNER-CHILCOTT

—Continued from page 44

plication in this case would be made under a recently enacted amendment (1957) to the New Jersey statutes concerning medical licensure.)

"If a graduate of a foreign medical school complies with 1-6 above, but graduates from a school that is not registered with this Board, it is then necessary for him to spend three years training in American hospitals, approved for intern and/or residency training, and he must sit for examination only if he does not possess a foreign license, but may sit for examination or have the license of another state endorsed, providing he has a foreign license and again providing his marks of the other State Board meet the qualifications of this State.

"I trust the above information is what you desire. You can readily understand from all of the above, how some graduates of foreign medical schools may have a wrong interpretation of our requirements. We do not use the term, *reciprocity*. We refer to the *endorsement* of a license . . ."

• Thus, a foreign license is necessary for endorsement in all cases. However, application may be made for licensure **by examination** by foreign graduates who do not have a foreign license to practice medicine.

Foreign Graduates

I am writing at this time to re-

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City & Zone_____State_____

—Concluded from page 48

quest reprints of your articles entitled "Licensure for Foreign Graduates." If there is a charge for this service please advise me and I will forward it. Thank you for your cooperation.

Thomas G. Gorman, M.D.
Chicago, Ill.

With great interest I studied your series, "Licensure for Foreign Graduates." Unfortunately I have mislaid my RESIDENT PHYSICIAN of October 1957. Since I was unable to locate this number at the medical library here in Ann Arbor, (they claim that

they never received that copy) I wonder whether you could send me another copy of RESIDENT PHYSICIAN of that month, so that I can make my list with requirements of all states complete. I would indeed be very happy if you could fulfill my request.

Rients van der Woude
Ann Arbor, Mich.

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Perrin H. Long, M.D.



The House Staff and Organized Medicine

Your editor has been disturbed for some time by the lack of interest of medical students and house staff members in the meetings of their county or state medical societies, and in that of the American Medical Association. One sees so few medical students or house staff members at monthly meetings of the local societies. And while thousands of medical students, interns and residents attend the annual meetings of the American Medical Association, it is a question whether this attendance is motivated by an interest in the scientific or organizational meetings and what they can bring to the student or the house staff member, or whether attending a session or sessions of the AMA meeting is prompted by a desire to accumulate as much "loot" as possible from commercial exhibitors. Truly, when we see students and other people cramming samples into shopping bags, or into large paper boxes, we can't help but believe that "loot" is the basic reason for their being at the meeting.

It would seem that as individual physicians, and as

—Editor's Page—

members of a profession which has contributed so very much to the happiness and welfare of our fellow men, we should examine seriously this problem of membership of the house staff in our medical organizations. Immediately, we will concede that there is a Student American Medical Association which should orient its members in the problems and aims of organized medicine. But does it? If medical society membership of house staff members, say in the Kings County Medical Society, can be used as a criterion of the eventual effectiveness of the student association's program, the answer is, "No."

However, it must be remembered that as far as many local societies are concerned, while they welcome house staff members to their meetings, no provisions are made providing young physicians with membership in the society. For example, in the New York metropolitan area, the Kings County Society (Brooklyn) alone provides types of membership for the house staff of Brooklyn hospitals. Information which we have received from the American Medical Association indicates that at least some local societies in nine states are admitting house staff members as special members. Of course, the over-all limiting factor as far as full membership for the house staff is concerned, is that of not being licensed as yet in the state where they are taking their internship or residency. All local and state societies and the American Medical Association require that an applicant for full membership be licensed to practice medicine.

Another factor which may tend to negate the efforts of the Student American Medical Association in this respect is the attitude of members of the faculty (especially those who are full-time) towards organized medicine. Currently, with so many faculty members in the

basic science departments being Doctors of Philosophy or Science, and not of Medicine, the possibility that they have little interest in, or comprehension of the problems and aims of organized medicine, or even may be antagonistic to it, must be taken into consideration.

It must be remembered that the basic science faculty is close to the student during his formative period in medicine. Furthermore, during the past twenty-odd years, a certain segment of our clinical faculty members (beginning with the so-called Committee of Four Hundred Physicians) have adopted ivory tower attitudes relative to organized medicine, and have done little but criticize what organized medicine is attempting to accomplish.

Certainly, the participation of full-time faculty members in the nonscientific aspects of their county and state medical societies appears to have declined in recent years. This also seems true as far as the activities of the House of Delegates of the American Medical Association are concerned. This may have a direct bearing on the attitude of the house staff towards our county, state and national societies.

We feel that under the leadership of the American Medical Association the various state medical societies could propose to their constituent societies possible solutions to this problem. Certainly, friendly proselytizing of the house staff by their attendings (all of whom are probably members of the local society), plus an understanding attitude on the part of hospital administration regarding time off for medical meetings, and an attitude of *really wanting* house staff attendance and membership on the part of the comitia minora, officers and members of local societies would go a long way towards making the house staff member feel as though he belonged.

We think it is really rather disgraceful that "organized medicine" has been so negligent in its organizational obligations to these young physicians. It is high time to pay them real attention!

Finally, it is fair to raise the question of cost to the house staff member of belonging to a county society. As far as we know, only the Kings County Society has types of membership for the house staff which cost three to five dollars a year. While this amount of money does not sound like much in the way of dues, in this day when so many members of the house staff are married, have children, and are on small stipends, even dues of three to five dollars per year may be too much for them. The suggestion is offered that *house staff members should not be charged dues* for their memberships in their county or city medical societies.

Frankly, your editor wishes that he knew the best answer to this problem, but he is not sure that he does. Any suggestions will be most welcome.

Perrin H. Long.



House Staff Training on a Private Medical Service

Can a private service afford adequate clinical training for residents and interns? Here is how this important question is being answered on one service. Essential ingredients: mature, diligent house officers, and visiting physicians impelled to transmit their own love and zest for clinical medicine.

Philip A. Tumulty, M.D.

The current expansion of medical insurance plans as well as other alterations in our way of living are exerting significant effects upon house staff training. One result is a constantly increasing hospital population of private and especially semi-private patients. This trend is not likely to be reversed. Our problem, therefore, is clear-cut. How can a medical service which is populated either wholly or largely by private and semi-private patients be organized

so as to afford adequate clinical training for house officers?

Such a training program should be developed with a definite purpose in mind. Should it be to teach the "art" of practice, perhaps in contrast to "scientific" medicine? Is it to produce a "practitioner" rather than an "academician"?

It is our conviction that to so point the training program is unwise. To do so is to operate under a premise which we consider erroneous; namely, that an excellent physician can be other than highly skilled in the science of medicine, or other than filled with personal concern for the human problems of his patients.

There should be a single goal—to afford maximal intellectual stimulation in a setting which offers sufficient opportunity for the individual to make best use of his par-

ticular capacities. Whether the product of such an experience becomes a practitioner or enters some other field matters little. If he starts off as a whole physician, he will later quickly add to himself any special arts or techniques his chosen field may require.

Three elements

There are three general sources of problems in organizing a teaching program on a private medical service: 1) the private patient, 2) the house officer, and 3) the visiting physician. Let us consider each briefly.

In our experience, the private patient has been the least difficult of the three, for he lends himself well to a first-rate teaching program. It is a rare individual of any economic level who does not respond

About The Author

A graduate of Georgetown University, the author received his M.D. from Johns Hopkins in 1940. After internship and a year of residency at Hopkins, he served three years in the Army and returned to complete his residency in medicine in 1948. During part of this time he was an American College of Physicians Clinical Fellow as well as instructor in medicine. Successively assistant, then associate professor of medicine at Hopkins, he was also Director of Medical Clinics from 1950-1953. In 1953 he was appointed Professor and Director, Department of Medicine, St. Louis University School of Medicine. The following year the author was named regional consultant in Medicine for the VA. Since 1955, Dr. Tumulty has been Chairman, Private Medical Service, Johns Hopkins Hospital; Associate Professor of Medicine, Johns Hopkins University; Physician-in-Charge, Private Patient Clinic, Johns Hopkins Hospital, and Consulting Physician, Baltimore City Hospital.

cooperatively to sincere interest and thoughtful care.

Patients are quick to detect that "the young doctors" are alert to their immediate needs and organize their daily care. They are willing to accept them as personal physicians. Of course, there are exceptions just as there are uncooperative patients who "sign the release book" on the public wards.

Perhaps there may sometimes be a higher than optimal incidence of functional disease on a private medical service, and admissions for "diagnostic work-up" which may not pan out to be of much consequence. On the other hand, any physician who intends to have contact with patients, whether in individual practice, as a member of a clinic, or in an academic setting, must early accommodate himself to the reality that a very large proportion of human illness is functional, and he must become adept at recognizing and managing it.

The clinician to whom functional disorders are distasteful will be neither completely effective nor very happy in his work. Admissions for a diagnostic work-up give experience in the differential diagnosis of clinical problems which are sometimes quite sophisticated and of a sort which may be excluded from ward services.

Moreover, as outpatient diagnostic facilities for the study of private and semi-private patients are expanded, it is probable that there

will be a decreasing number of hospital admissions of these two types of patients.

Advanced disease

Finally, it is probably true for obvious reasons that individuals with far advanced disease, overwhelming infections, marked deficiency states and the like, are now more frequently admitted to ward than to private services. With further expansion of medical insurance plans and third party payments, this difference is likely to become less marked. Very rapidly, semi-private beds are becoming filled with insurance-holding patients who would have been in a "free" or ward bed a few years ago. Nevertheless, experience in the management of such patients is an essential part of the house officer's training, and it must be afforded him. This opportunity can be brought about in a variety of ways:

- Experience in the emergency room and general dispensary or outpatient department.

- Affiliation with some ward service, such as a city hospital, with reciprocal rotation for two month periods.

- The setting aside of a small number of beds for "service cases" to which the house staff may admit patients with unusual teaching potential.

- Allowing the resident physician, under a consultative type of supervision, to admit "hospital referred" patients to his own service.

Clinical responsibility

In our opinion, it is not possible to afford a house officer adequate training unless this type of clinical experience is provided him by one method or another. It also fills, at least in part, the understandable desire of the house staff to exercise a greater degree of final responsibility for patient care during a portion of their training; this is of great importance, as we shall emphasize.

The problems arising from the house officers on a private medical service can be summarized as stemming chiefly from the practical necessity which obliges them to share clinical responsibility with the patient's personal physician.

It has been our experience that there is a very direct relationship between the emotional and intellectual maturity of the physician in training and the degree to which this requirement of shared responsibility leads to dissatisfaction. The immature person becomes resentful of it and carries a chip upon his shoulder, and whatever good might be harvested from the period of training is destroyed by negativism. He feels constantly put upon, relegated to the background, the perpetual low man on the totem pole. He characterizes himself as a clerk and a secretary or a laboratory technician.

Once he has thus depicted himself, it may be quite impossible to disabuse him, and the year is spoiled. Even worse than the personal loss

to the individual is the fact that such immature reactions are oftentimes infectious.

Maturity

The house officer on a private medical service must be a person of balance and maturity if he is to derive maximal intellectual stimulation from his period of training — to express it another way, if he is such a person, he almost certainly will.

The mature, young physician recognizes that during all stages of his clinical life it will be necessary at times for him to defer his own judgment to that of someone who has had greater experience. He will understand that the only way to acquire more responsibility is to deserve it. He will appreciate the fact that in training there must be levels of experience and responsibility — and that one climbs upward from the bottom.

The mature house officer has the perspective to be aware of the overall opportunities to learn which are his, and he does not fix his attention upon the less satisfactory features which are part and parcel of any service. He will be generous and fair, and will expect to get back no more than he gives of himself.

This sort of person will never complain of inadequate patient responsibility, for his good sense and maturity will at once become evident to the senior staff who will be delighted to regard him as a partner,

and to give him as much latitude as he deserves.

Problems arising from the visiting physicians are both practical and psychological in origin — and, as usual, the latter are the more difficult to manage.

Practical problems

Under the heading of practical problems are:

- The wide diversity of hours the visiting physicians may have for making their ward rounds.

- Inability to control admissions so as to avoid recurrent flooding of the service.

- The press of time, limiting the opportunity of some of the senior staff to work in close association with the house officers.

- Varying abilities of members of the visiting staff to teach and inspire those in training.

Psychologically, the major problem existent on some private services is the failure of occasional members of the senior staff to fully appreciate the fact that today's house officer expects — and is in a strong position to require — that his internship and residency be a period of continued educational experience, well organized, intensive, exhilarating.

It is no longer satisfying to the resident simply to be afforded the privilege of experience in history taking and physical examination and routine daily care of patients. Nor is it sufficient merely to permit him

to learn what he can by peering over shoulders and by mechanically following orders.

Today's house officer requires an apprenticeship in which he is actively brought into clinical problems, not just told about them; he wants opportunities to exercise his judgment and to develop responsibility, as well as to give advice.

He does not want to be a bystander, but instead a member of the team whose knowledge and advice are sought in the care of the patient.

Visiting physician

These requirements have been met by the attitude and performance of the visiting physician on the successful private medical service. Genuinely interested in the education of the house officer, the visiting physician on such a service demonstrates his belief that the resident is not in training simply as an accommodation or service to the visiting staff. Furthermore, the visiting physician is willing to accept those occasional inconveniences which an organized teaching program for the house staff may impose, such as temporary unavailability of the house officers while teaching sessions are in progress.

He devotes extra time on his rounds to informal discussions with the house staff and he engages in free give and take of ideas about clinical problems. He plans his management of the patient with the

house officer—and by his attitude makes it clear to the patient that the house officer is a valued associate. He never circumvents the house staff by leaving orders of which they are ignorant, or by making important decisions regarding a patient's care without their knowledge. He adds to their experience by allowing them to carry out procedures such as rectal and pelvic examinations, thoracenteses and similar procedures whenever feasible.

Above all, the visiting physician on a private teaching service gives to the house staff the fullest measure of responsibility and opportunity to employ that degree of initiative of which he judges them to be capable. Oftentimes, this can be accomplished by the wise teacher through the simple device of saying to the house officer, "what do *you* think we ought to do for this patient?" He knows that frequently the answers will contain sound advice.

Formal schedule

While the essence of a satisfactory training program consists in this type of daily working together of the house and visiting staffs, and nothing else can substitute for it, there should also be a supplemental, "formal" teaching schedule. This must be well organized and under the direction of some senior member of the staff who will regard it as a major responsibility and be willing to devote to it a considerable portion of his time. The following

is an outline of such a program which we have found satisfactory on our private medical service.

DAILY 9 A.M. Assistant resident and two interns on each ward make ward rounds together, visiting each patient and planning daily care, accompanied by the head floor nurse.

MONDAY 5-6 P.M. History meeting, conducted by the resident and the chairman of the service. In addition to checking the accuracy and completeness of the final diagnoses in the discharged patients' charts, all operations and deaths are discussed and service problems reviewed.

TUESDAY, THURSDAY 10-11 A.M. Bedside rounds are made with the house staff on each floor by a member of the visiting staff.

WEDNESDAY, FRIDAY 5-6 P.M. Rounds are conducted by the resident with his staff.

TUESDAY 5-6 P.M. X-ray teaching conference in which instructive films of the previous week are reviewed by a member of the department of radiology.

DAILY 1-1:30 P.M. The resident reviews all x-ray films of the previous twenty-four hours with his assistant residents.

While it is, of course, important for the house staff to attend these sessions as consistently as possible, patient care naturally takes precedence and residents and interns can always be reached by visiting physicians to discuss urgent matters.

There are some features of this program which deserve underlining.

Perhaps the most significant is the fact that the visiting physicians have voluntarily agreed to allow their patients to be seen during the Tuesday, Thursday morning bedside rounds which are conducted by various members of the senior staff on each ward for periods of one month. This willingness to pool the available clinical material in a cooperative way for the benefit of the house staff has given the teaching program strong impetus.

Formerly, the teaching sessions had been of the conference type in which a particular clinical entity was discussed by someone with a special interest. While such teaching is worthwhile, it by no means supplies the same experience and stimulus that bedside discussions of practical clinical problems afford. The latter is an essential part of a medical apprenticeship.

The resident physician plays a significant role in this teaching program. He must have a sound clinical background as well as a capacity for teaching. On a private service it is the resident who supplies the cohesive element. He should be selected carefully and given the fullest support.

Special Interests

As valuable as the formal teaching program is in directing and stimulating the house staff, it should in no way supplant the informal instruction which the house officers receive from their contacts with the

visiting physicians in the day to day care of patients. A formal program no matter how well done cannot substitute for this.

If possible, the young physician in training should be given an opportunity to develop some special clinical interest. While this may be accomplished in a variety of ways, we have found it effective to assign each assistant resident to the clinical division head of his own choice—cardiology, hematology, gastroenterology, etc.—for one- or two-year periods.

During any available free hours, the assistant resident attends the special activities of this particular division, such as rounds, clinics, conferences, etc. He also has an opportunity to develop a clinical perspective.

Informal

We have purposely left this arrangement an informal one, allowing the house officers to make as much or as little of it as they are inclined. Some have made much of it. Daily responsibilities, of course, take precedence over special interests.

These are some of the aspects of the organization of a house staff training program on a private medical service. The need to learn how to do this well has been emphasized as a growing necessity; some of the problems have been pointed out, and a few solutions suggested.

As might be expected, the essential ingredients of success are ma-

ture, diligent house officers on the one hand, and on the other a group of visiting physicians who feel impelled to transmit their own love and zest for clinical medicine. There needs to be some sort of an organized

framework of instruction, but what form this takes is not so important, provided the two groups are united by an enduring bond of interest and enthusiasm in the study and care of the sick.

Biochemistry Grants

The first duPont grants to medical schools to improve the quality of teaching have been announced by the duPont Company. Grants of \$3000 have been made to departments of biochemistry of twelve medical schools. The purpose of the grants which allow the institutions to select individuals receiving the funds is to "strengthen the teaching of this pre-clinical subject that is of growing significance in medical education." The grants are a part of more than one million dollars in awards for the coming year to 135 universities and colleges in duPont's annual program of aid to education which dates from 1918. The grants for medical teaching in biochemistry were made to Columbia, Cornell, Harvard, Johns Hopkins, Stanford, Vanderbilt, Washington (St. Louis), Western Reserve, Yale and the universities of Chicago, Pennsylvania and Rochester.

Medical Ethics and Etiquette

It is interesting that this principle, which to my way of thinking is in part a new concept in the Principles of Ethics, should be placed second. This high position in the order of the ten Principles demonstrates the high regard in which medical research and the advancement of medical knowledge is held by the Judicial Council of the American Medical Association which formulated the Principles, and by the House of Delegates which accepted them. The principle is taken directly from the Oath of Hippocrates; and when one considers it, one wonders why its enunciation in its present form has been so delayed. It is interesting that Dr. Welch missed this opportunity in 1903.

Common good

The avowed objective of our profession is the common good of mankind. The more we strive to improve our own medical knowledge and skill and to increase the total

Section 2. "Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments."*

body of scientific knowledge, as such relates to medicine and its auxiliary branches, the closer we come to achieving our objective. We spend our lives dispensing the benefits of acquired knowledge, and we know full well the importance of rapid dissemination of proven medical thought and practices, if the best interests of our patients are to be served. Our profession is universal in its philosophy. Nationalistic and chauvinistic attitudes cannot be tolerated.

Teaching

As physicians we must remember that all that is new, good, and proved under rigorous scientific dis-

**Principles of Medical Ethics*
J.A.M.A. 164:1484 (July 27), 1957

PREAMBLE

"These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws, but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public."

cipline should be made available for the care of our patients and those of our colleagues. If the physician possesses special talents or technical abilities, he is expected to use them fully. He must also realize that he should do everything in his power to teach his techniques and skills to others so that the greatest number of people may benefit from his accomplishments. He must be willing and eager to devote much time to graduate and postgraduate teaching. The informed physician of today cannot retire to an ivory tower, but must be constantly imparting his knowledge and skills to his patients, students, and colleagues; this is particularly true of surgeons, as a study of the history of surgery so well demonstrates. Surgery is not a knowledge of techniques. It is an art, learned as an apprentice at the side of a master.

The physician must never stoop

to the use of devious methods in his attempts to advance medical science. In all experimentation on human beings, "the voluntary consent of the person on whom the experiment is to be performed must be obtained, the danger of each experiment must have been investigated previously by means of *adequate* animal experimentation, and the experiment must be performed under proper medical protection and management." (J.A.M.A., March 30, 1957.) The dignity and rights of the individual patient must always be protected in each experiment. We are not dealing with guinea pigs.

Patenting

This section also covers the question of patenting or copyrighting medical knowledge, drugs or devices. It is interesting that the patenting of a drug or device by a physician was considered unethical by the American Medical Association until as recently as 1955. However, in the revision of the Principles of Ethics which was completed in that year, it is stated that, "a physician may patent surgical instruments, appliances and medicines, or copyright publications, methods or procedures."

However, it is plainly and clearly stated that it is *unethical* to use such patents or copyrights, or the remuneration therefrom, to retard or inhibit research, or to restrict the benefits which can be derived by the profession or public from the pro-

ected drug or device. (J.A.M.A., March 30, 1957.) This has seemed to your editor to be a reasonable solution of a problem that has increasingly plagued the profession for the last half century.

It is still unethical to prescribe or dispense remedies, the composition of which is secret, or any remedy, the composition of which is unknown to the physician. The manufacture or promotion of the use of

such agents by the physician is also unethical.

In this respect it is both unethical and, in certain states, of doubtful legality, for physicians to control pharmaceutical companies and interlocked drugstores for the purpose of restricting their prescriptions to those products manufactured by the companies in which they hold an interest, and thus profiting at all levels.



"I'll swap my acute thyroiditis and two infectious hepatitis for your lupus."

DOCTOR, PLAN TO W

Writing papers for medical journals is one way in which doctors share information. The papers should reflect the competence as well as the literacy of the physician-writers. Whether they use outside editorial help or are strictly do-it-yourself authors, there are aids to rely on and pitfalls to avoid; some of each are noted here.

Mildred Hoerr Lysle



TO WRITE

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Lysle



Doctors are the most zealous teachers. They are continuously teaching each other by sharing their experiences in regard to a rare case, an unusual syndrome, an impressive number of patients, a new surgical technique, a new concept in therapy, a series of long follow-ups. Much of this sharing is accomplished by writing papers and publishing them in the medical journals.

At last count, 4,828 medical journals are published throughout the world.* This number represents all medical and surgical specialties, all gradations of usefulness and of quality in writing and in publication. Doctors serve as editors and reviewers and judge the papers submitted to the journals.

Journal requirements

To be acceptable for publication a paper must meet editorial requirements technically and physically. Technically the paper must be sound, else it will receive adverse criticism and the author will receive a formal note of rejection.

* *World Medical Periodicals*, 2nd ed., 1957, New York. *World Medical Association*.

The physical requirements for a paper are described, in many American medical journals, on a page of information for contributors. The instructions are specific for typing (double or triple spaced), for the number of copies to submit (one, or more), for the kinds of illustrations to use, whether photos should be unmounted, the limit on the length of the title, and how to list the references.

Probably you are well acquainted with the *Journal of the American Medical Association*, your state medical journal, and your specialty journals. Have you written papers for them?

Too busy

Some doctors say that they are "too busy to write." Yet, having a crowded schedule does not always prevent a doctor from becoming an author. Sometimes it seems as though the doctors who see the greatest number of patients, who have the

heaviest operating schedules, who accept more and more speaking engagements, are the ones who also write the most papers.

The "nonwriting doctors" may be doing just as important medical and surgical work, but perhaps only a few associates and the grateful patients' families and friends know about it.

Discipline

If you think that you are too busy to write, consider the resolution of one young pathologist who set for himself a stiff schedule of writing. He resolved that he would write one paper each month and submit it for publication and, regardless of whether or not it was accepted by a journal, he would keep on writing one paper each month. At the last count he had ninety-six papers published—with himself as sole, first, or joint author.

"That's all right for him," you may say, "but I don't have material

About The Author

Born in Chicago, Illinois, the author holds Bachelor of Science and Master of Science degrees from the University of Chicago, and is a member of Sigma Xi and Phi Beta Kappa. Currently she heads the editorial department of the Cleveland Clinic Foundation, and is manuscript editor of the *Cleveland Clinic Quarterly*. She has edited books and engineering research reports, conducted a weekly column of local news for a small newspaper, and had articles and a book published. A member of the American Medical Writers' Association, and of the Society for Technical Writers and Editors, the author says: "Language is an exciting tool to work with, and doctors are inspiring people to work for."

for a paper a month." Not now, Doctor, but you will have material one day. On that day—though you have had little formal instruction in English, though you use medical jargon, though you fumble for words to express yourself—you will want to use the printed page to share your professional experience with your medical contemporaries near and far.

If you have not written a medical paper since producing a doctoral or a fellowship thesis, maybe you would like to be briefed a little on the mechanics of writing for publication, and learn where a physician-writer can obtain help—in books and in services.

Books

Good advice is offered in a number of books which have been written with the express purpose of upholding high ideals for medical writing; their suggestions are worthwhile and in excellent taste. Especially helpful are:

Hewitt, R. M.: *The Physician-Writer's Book—Tricks of the Trade of Medical Writing*. Philadelphia, W. B. Saunders Company, 1957, pp. 415.

Fishbein, M.: *Medical Writing: The Technic and the Art*. 3d ed. New York, The Blakiston Division, McGraw-Hill Book Company, Inc., 1957, pp. 262.

Davidson, H. A.: *Guide to Medical Writing*. New York, Ronald Press Company, 1957. pp. 333.

Jordan, E. P., and Shepard, W. C.: *Rx for Medical Writing*. Philadelphia, W. B. Saunders Company, 1952, pp. 112.

Current editions of Blakiston's *New Gould Medical Dictionary*, Dorland's *Illustrated Medical Dictionary*, Webster's *New Collegiate Dictionary*, and Roget's *International Thesaurus* are exceedingly useful. There is helpful information in the back of Webster's Dictionary in the sections on *Punctuation, Compounds, Capitals, Etc.*, and *Preparation of Copy for the Press*.

Editorial

The doctor who is on the staff of an institution such as a university, a foundation, or a clinic probably will have the services of an editorial department. A manuscript editor will help him sort his ideas and put them into a form that will be acceptable to the journal he is writing for. The extent to which the doctor relies on outside assistance depends on his confidence both in his own writing and in the ability of the manuscript editor.

The doctor may give the manuscript editor a rough working-copy and request help in organizing and in writing up the material, or he may ask for light editing and expect only minor changes. The manuscript editor is prepared to scale his own effort up or down according to what is required by the author.

The doctor in private practice can choose his editorial assistant. His

wife or his secretary may be qualified to give assistance or criticism, in addition to typing the manuscript (and retyping and retyping and retyping it). Incidentally, typists should not become discouraged at the number of versions to type; three or four rough drafts are not uncommon—more if there is time and the author is a perfectionist.

The doctor may engage the services of one of the many excellent free-lance medical manuscript editors. These editors are prepared to give expert advice, help with the organization and the writing, do major revising, as well as provide the final typed copy. They will expand or limit their editing efforts as the author directs.

Special service

The physician-writer may avail himself of the medical manuscript editing service that is sponsored by the American Medical Writers' Association. Interested authors are invited to get in touch with Harold Swanberg, M.D., Secretary-Treasurer of the American Medical Writers' Association, 510 Maine Street, Quincy, Illinois. The service is a consultation-by-mail service and is in constant use by physician-writers.

Whether you have assistance or not, the following notes are intended to help you when you write *The Paper*.

How to begin

A good way to get started is to

jot down an outline of the main points you wish to discuss. Next put down on paper or into a dictating machine your thoughts relative to these points. In this first draft you need not be concerned with the order of your thoughts. It may be that the summary, not the introduction, will be the section you write first. Record or write out everything, even those comments that may seem somewhat trivial or only tentatively significant; it is much better to pare down and condense later on than to pad the paper.

Sorting, that is, precise discrimination and selection, comes next. Examine each sentence for its worth, its pertinence to the thesis, and its grammatical construction. The material itself will suggest sections such as introduction, experimental work, clinical application, clinical features, etiopathogenesis, diagnosis, case reports, treatment, results, discussion, comment, summary.

Next rearrange the sentences in logical order. This requires scissors and a stapler or paper clips and may take a number of drafts before you are satisfied.

Title

The title is an extremely important part of the paper: it is the name by which your contribution will be known for all time. It should lead, not mislead, the reader to your thesis.

If the paper is published in a

journal that is indexed in the Quarterly Cumulative Index Medicus, the words *the*, *a*, *an*, will be omitted in the indexed version of the title. Therefore, the title should read well when it is stripped of those three little words.

Did you notice that you need not begin writing by settling on a title for your paper? Oddly enough, you should *not* spend much time in deciding on the exact wording of the title at first. As the paper is being written, the concepts and approaches will become sharply defined and any preconceived title may be inadequate or even downright inappropriate.

A clumsy title may repel readers who will fear the paper may be just as clumsy. Some medical journals limit the length of a main title to 80 spaces but do not limit the length of a subtitle.

Introduction

There seems to be a choice of two approaches in introducing your material. One is to begin with a historical background of the work of your predecessors and then proceed to your contribution to medicine. The other is to begin with your contribution and in the discussion or comment mention the work of previous investigators.

The nature of your contribution will help you decide how best to introduce your material. For example, a review of the literature appropriately could begin with the

historical approach. A report of a discovery perhaps would begin with your own research.

Headings and paragraphs

Headings are a courteous alerting to the reader as to what is coming next. They encourage him to believe that progress is being made. Moreover, long paragraphs and no headings can be forbidding. There is no white space to give relief for the eyes; no "seventh-inning stretch" for the mind.

Perhaps you have noticed that RESIDENT PHYSICIAN, this very journal, has obligingly numerous headings and mercifully short paragraphs. They make for greater readability and for faster reading.

Other journals may not have so liberal a policy as to length of paragraph; a quick scanning of a current issue of the journal you are writing for will give a clue as to the suitable length for paragraphs.

Tables

Tabulations usually take a large amount of valuable space. If the material is understandable when written in sentences, do not repeat it in a table. However, if it is much clearer in table form, it is unnecessary to also present a description in the text. Duplication of material is frowned upon by many editors.

The mutual reinforcement of tabular data in slides and the expansion of the material in textual presentation can be justified for speeches or

for postgraduate courses, but not always in a medical journal in which space is at a premium.

Numbers

Numbers can be tricky. After a draft has been written, carefully check the text, summary, tables, and the legends to the illustrations to make sure that cross references to the numbers of cases, patients, ages, dates, percentages, references, are identical in all places—and above all, that they are correct.

Recently, in a paper that was being edited, a table listed 65 patients as having undergone a certain surgical procedure. Yet the summary incorrectly stated that 64 had been treated. Such an error could be the manuscript editor's mistake, the typist's, or even the doctor's, but the journal editor must never see this kind of carelessness.

In evaluating a small series of cases—for example a total number under 100 cases—even though the series may be considered relatively large because of the rarity of the disease, statistically it is not large enough to record groupings in percentages. For example, the proportion of five cases of a total of 20 cases is well understood without adding, in parentheses, 25 percent. When percentages are related to small totals the paper becomes needlessly top heavy with figures.

Illustrations

Identify each print or drawing

with your name, title of the paper, your address, number of the figure. Use a label, or else write *lightly* with soft pencil on the back of unmounted photos, for the top surface will easily become marred by the pressure of the pen or pencil. Also, pressure from paper clips is damaging to the glossy surface. Plastic sandwich bags are useful to keep the photos together.

Ask the artist to use lettering guides (rather than freehand lettering) for subtitles and scales of line drawings. The improvement in appearance is worth the trouble.

Summary

There seem to be two types of summary. One type comprises a general statement that something has been presented or discussed. The other, based on a teaching concept, gives specific information in capsule form.

With the first type of summary, readers who glance at it in the expectation of getting a pretaste of the thesis will be disappointed and may not be tempted to read the entire article. Your material, the purpose of your paper and the policy of the journal will help you to decide which type of summary to write.

References

One of the most exacting and important jobs in connection with writing a medical paper is the assembling of the reference listing. References are the published works

to which you refer in your text; they have been actually examined by you personally, not through the eyes of another author.

It is not considered good form to mention works *as references* which you yourself have not read. If you must mention a report published at some remote time or place which is mentioned by another author, and which you do not have access to, then list it as *cited* by the author in whose publication you saw it mentioned. In that way the responsibility for its accuracy rests on the author who presumably saw the original paper.

The *exact* names and initials (Jr., III, too), title of the paper (or chapter), title of the journal (or book), number of the volume, pages, year and month of publication, (name of publisher and place of publication for a book), are absolutely essential to a high-grade scientific contribution.

Three by five inch cards are good on which to write down all (repeat, *all*) of this reference information at the time that you examine the publication. You will be spared many hours of duplicating effort if you school yourself to do this exacting copy work *at the time you consult the literature*.

Journal boards vary in their policies on references. Some limit the number they will let an author use, others delete numbers and references that are unaccompanied by names in the text.

Reference material should not be quoted at length; presumably your reader can follow-up on his own. A paper that substitutes "name-dropping" for sound technical development of the subject really steals the author's and the readers' time and is a padded paper.

Criticism

To obtain friendly, exacting criticism, many doctors ask one or more of their associates to read the paper critically and to suggest ways of improving it. This objective analysis is invaluable, even if the comments sometimes seem harsh. If the paper satisfies a rigorous pre-reviewing, its chances for publication are automatically improved.

Shelf

When the paper has been typed for the last time and is ready for submission to the journal, put it aside and let it rest. Every paper should have some "shelf-life." In a few days or even a few weeks read it again. You will be glad you didn't submit the paper with flaws or omissions which have now become apparent on re-reading.

When you submit the manuscript do not fold it. Put the paper in a full-size envelope.

Use a cardboard insert to keep corners from becoming dog-eared in transit.

Usually the journal will acknowledge receipt of your paper within ten days, but it may be several

months before you are notified that the paper has been accepted—or rejected—for publication.

The length of time between acceptance of a paper and its publication date varies from several months to several years. Publication may be speeded up because of the timeliness of the subject, or it may be delayed because of a huge backlog of other good papers.

The journal will expect to have exclusive rights to a paper that is accepted for publication. This does not mean that an abstract of, or even the entire paper, or a translation of it, may not be published elsewhere, but it does mean that the paper and the illustrations may not be republished without the expressed, formal consent of the publisher or editor.

Proofs

After the paper has been accepted by the journal and the printer has set it in type, proofs are run off. Usually, a set of proofs is sent to the author, often with instructions on how to mark corrections, and with a reprint order form. Read proofs carefully for misstatements

and for typographical errors. Proofreaders' marks (explained in the back of Webster's Dictionary) should be used to indicate changes you wish to make.

Author's proofs must be returned promptly. If not, one of two things can occur: 1) the paper will be published without your corrections; 2) the paper will be scheduled for a later issue.

Proofreading can be amusing: in a paper on cardiac surgery there was a sentence about an "open-hearth operation;" in a program footnote, a doctor was identified as a "guest speeder."

After your proof has been returned to the journal, you can sit back, relax, and wait for it to be published.

You also can begin to think about your *next* paper.

Plan to write

If you are somewhat impressed by the honest effort it takes to write a medical paper, kindly remember what a well-known surgeon who is a "writing doctor" recently said: *"You know, the more you write—the easier it becomes."*

Theodore L. Bliss, M.D.

Guest Editorial

Opportunities in an Open Staff, Private Hospital

The Akron City Hospital serves the adult population in a Metropolitan area of nearly half a million. It provides every modern and scientific hospital facility for all qualified physicians in the community. It is a private nonprofit institution administered by a Board of Trustees who serve without remuneration, and by an Executive Director. It is not associated with a medical college, and does not have a closed medical staff, thus, the name of the Hospital indicates its field of service to the public and to the profession, but belies the fact that it is a private general hospital with 565 beds. The Medical Staff and the Administrative Board both believe that an important function of the Hospital is to have training programs that will attract the best graduates of the leading medical colleges for their internships and residencies.

The success of an institution such as ours depends upon the close cooperation between the Board of Trustees and the Executive Director and the Medical Staff. Each has a distinct sphere of jurisdiction, yet their respective responsibilities are intertwined. The physicians



T. L. BLISS, M.D.
President
Medical Staff
Akron City Hospital

on our staff are in private practice and include men engaged in every specialty field and in general practice. The medical staff functions in a democratic manner by means of committees that are representative of all departments. The Executive Committee is the direct liaison between the Staff and the Administration and their relations are close and most cooperative.

I believe we have been unusually successful in welding 121 physicians, graduates of 38 different medical colleges, with their various medical backgrounds, into a team. Their greatest concern is for the good of the public, the Hospital, the patients, and the intern and resident training programs. Each staff appointment is made on the basis of the physician's ability, competency, integrity, loyalty, and interest in cooperating to provide the best possible training program for our hospital interns, residents, and nurses.

An internship and residency in an open staff, private, general hospital affords the advantage and opportunity of the various and often different viewpoints of many physicians.

I consider it a privilege, honor and responsibility to serve this year as President of the Medical Staff of Akron City Hospital.

Akron City Hospital



Urology residents ready artificial kidney.

All patients in this private, nonprofit hospital are teaching patients. Seven approved residency programs of the columnar type provide training for 42 residents, 24 interns.

Although its name implies city ownership and administration, Akron City is not a municipally run institution. Instead, it is a private, nonprofit hospital of 565 beds in 8 modern buildings located little more than a mile from the heart of downtown Akron.

In its 65th year, Akron City consists of 8 modern buildings on 14 acres of ground. Some 18,000 inpatients are cared for yearly, while 24,000 patients receive medical care through the hospital's busy emergency room and outpatient departments.

INTERN ROTATION

SERVICE	MONTHS
Medicine	3
Surgery	3
Ob-Gyn	2
Pediatrics	2
Emergency Room	1
Elective	1

(Vacation—one week)

Bartges was purchased, and in it on October 11, 1892, was opened Akron's first general hospital. The growth of the hospital since its founding is a result of greater patient needs, stemming from advances in medical science and from a growing population.

History

The hospital was built by contributions from many sources. A French-speaking immigrant, Boniface DeRoo, was the first contributor, thus becoming the founding father of the hospital. Following augmentation of this original contribution by Thomas W. Cornell and Ohio C. Barber, the project was launched.

The brick mansion of Dr. S. W.

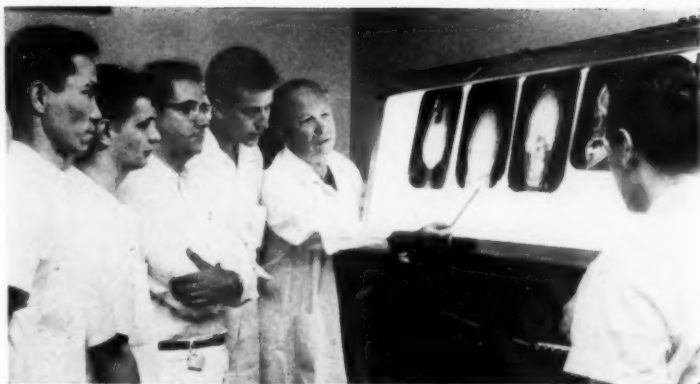
Medical staff

The medical staff of Akron City Hospital is composed of 121 staff physicians, 425 privilege staff members, 42 residents and 24 interns among the following services: general surgery, medicine, orthopedics, thoracic surgery, genitourinary surgery, obstetrics and gynecology, radiology, pathology and general practice.

Staff emphasis is on care of the patient, graduate medical education

Patients in Akron City's outpatient clinic are followed by the hospital house staff. Each year the various services of the clinic handle nearly 14,000 patient visits.





X-ray conferences are an important feature of resident training at Akron City Hospital.

and medical research in the clinical and basic sciences.

The hospital employs about 320 registered nurses and maintains a three-year nursing school which graduates 40-50 registered nurses annually.

Internship

Internships at Akron City Hospital are rotating. A quota of 24 interns allows for about 25 beds per intern. (Akron City has the distinction of having secured its full quota of 24 interns for the past 5 years—the only hospital in the State of Ohio to accomplish this.) Intern appointments are made in conjunction with the National Intern Matching Program.

The intern performs his duties under the supervision of his resident and attending physician. The re-

sponsibility granted the intern is directly proportional to his judgment and ability. His primary responsibility is for the care of all hospitalized patients. He performs all histories and physical examinations, technical procedures such as lumbar punctures and thoracentesis, and participates actively in ward rounds and conferences. The intern also receives valuable training in the outpatient department and emergency room.

This year the hospital initiated a

STIPENDS

Interns	\$200
1st Year Residents	250
2nd Year Residents	275
3rd Year Residents	300
4th Year Residents	350

Interns and residents receive room, board and laundry.



preceptorship program for interns. A staff physician designated as a preceptor is assigned two interns. The preceptor is to function as a mature, experienced advisor by personal contact with the interns assigned to him. The plan is envisaged, not as a training or teaching program, but rather as a means for "tightening" the internship in all its nonprofessional aspects.

Residency

Akron City Hospital offers fully accredited board training in seven

specialties: medicine, surgery, obstetrics and gynecology, orthopedics, genitourinary, radiology and pathology. A general practice residency is also available for those desiring additional training before entering private practice. Progression of training is through a columnar rather than pyramidal system.

Applications for residency appointments are made to the office of the director of medical education and are processed by the department of the specialty concerned.

The resident supervising the in-



Photo at left shows the integrated physical plant of ACH consisting of eight modern buildings on fourteen acres.

ACH resident programs include regularly scheduled teaching conferences such as the one pictured here in pathology.





Used primarily to integrate the basic sciences with the clinical experience of the resident, bedside teaching plays an important role in resident training.

terns assigned to him, and under the direction of the staff physician, is directly responsible for all patient care. Also, at Akron City Hospital every patient is a teaching patient—regardless of financial arrangement.

The assistant residents and interns each perform their respective duties on the team headed by the resident and directed by the attending physician. All members of the house staff team are called upon to exercise independence of judgment and responsibility commensurate with their experience. In this way the resident is permitted to assume increasing

responsibility in the care of patients.

Numerous conferences, rounds and seminars are held throughout the year; attendance and participation in these meetings is required. The basic meetings are the staff conferences, clinical pathological conferences, tumor conferences, and x-ray conferences.

Didactic instruction in the basic sciences is offered at the bedside by staff physicians who have developed special interest and capacities in the application of this special knowledge. This method of bedside teach-

Experi
reside
equipe



Experimental and research surgery are basic to the training of a surgical resident. Here, residents are shown in cardiac surgery employing the pump oxygenator and electronic equipment. Below, scintillation spectrometer used in thyroid uptake study at radioisotope lab.





Here, resident adjusts cervical traction apparatus for patient on orthopedic ward.

CONFERENCES

MONDAY

- 8 AM Medical Ward Rounds (junior staff)
- 10 AM Medical Clinic (medical interns, general practice, resident and one medical resident)
- 1 PM Ob-Gyn Pathology Conference
- 5 PM Chest Conference—Edwin Shaw Sanatorium (all residents and interns invited)
- 6 PM Orthopedic Conference (First Monday)
- 6 PM Ob-Gyn Conference (Second Monday)

TUESDAY

- 8 AM Dermatology Clinic (bi-weekly) (medical and general practice residents)
- 9 AM Arthritis Clinic (medical and general practice residents)
- 10 AM Arthritis and Rheumatology Lectures (medical residents and interns)
- 12:30 PM Prenatal Clinic
- 1 PM Medical Clinic (medical interns, general practice, resident and one medical resident)
- 6 PM Medical Staff Dinner Meetings—(thesis presentations—junior and senior staff and medical house staff)
- 6 PM General Practice Dinner Meeting (First Tuesday)

WEDNESDAY

- 8 AM Senior Rounds (senior staff)
- 12:30 PM Tumor Conference (all residents and interns)
- 1 PM Ob-Gyn Conference and Journal Club
- 1:30 PM Electrocardiogram Conference—Dr. Jensen (all residents and interns)

THURSDAY

- 8 AM Medical Ward Rounds (junior staff)
- 10 AM Diabetic Clinic (medical residents and general practice resident)
- 12:30 PM Prenatal Clinic
- 1 PM X-Ray Conference (Second and Fourth Thursdays—all residents and interns)
- 1 PM Audio-Digest Tape Recording and Current Medical Literature (medical interns and residents)
- 2 PM Pharmaceutical Representative (all residents and interns)
- 6 PM Surgical Journal Club (Third Thursday—surgical interns and residents)
- 6 PM House Staff Dinner Meeting (Monthly)
- 6 PM General Staff Meeting (Third Thursday Quarterly)

FRIDAY

- 8 AM Surgical Conference
- 8 AM Ob-Gyn Conference
- 8:15 AM Medical Conference
- 9 AM Clinical Pathological Conference
- 9:30 AM Surgical Grand Rounds
- 10 AM Medical Clinic (medical interns, general practice resident and one medical resident)
- 10:15 AM Microscopic and Gross Pathology
- 12:30 PM Gynecology Clinic

SATURDAY

- 10 AM Neurological Conference (medical residents and interns)
- Noon Cardiac Conference—Dr. Jensen (all residents and interns)

ing correlates the sciences of biochemistry, bacteriology, physiology and pathology with the clinical training of the resident.

Finally, in the training program, an effort is made to encourage and allow a specified period for pursuing a special interest in research.

Childrens Hospital

All interns and the orthopedic and surgical residents of Akron

City Hospital rotate through Childrens Hospital for their pediatric training.

The Childrens Hospital of Akron is a 185 bed hospital which is presently building to a capacity of 300 beds, and admits children under the age of 16 years. It is operated separately by its own board of trustees.

Research

Research is carried on in the dif-

Modern library provides residents with nearly 6,000 volumes and 158 periodicals.



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APPROVED RESIDENCIES—AKRON CITY HOSPITAL

SERVICE	CHIEF OF SERVICE	NUMBER OF RESIDENTS	PROGRAM YEARS
Internal Medicine	A. P. Ormond	4	3
General Surgery	S. A. Schlueter	14	4
Obstetrics & Gynecology	D. C. Snyder	7	4
Orthopedics	A. E. Davis	6	3
Pathology	L. F. Catron	4	1-3
Radiology	F. T. Moore	5	3
Urology	E. W. Cauffield	1	3
General Practice	D. J. Roberts	3	2

The needs of the department each year determines the number of residents chosen by the executive director and the medical staff.

ferent phases of medicine and in close association with the clinical and didactic activities of the hospital. Residents are assigned to the research laboratory for specified periods during their training.

In the recent past Akron City Hospital has provided for the Akron area, through its research department, facilities for cardiac catheterization, artificial kidney, radioactive isotopes (both diagnostic and therapeutic), cardiac surgery, and preservation of homografts, thereby contributing to better patient care and effecting medical progress in this area.

Outpatient

The hospital operates an active

House staff members make good use of the recreational facilities provided at ACH. Residents enjoy pocket billiards.



outpatient department for medically indigent patients. Clinics in all departments are held throughout the week, except Sunday. An average of 14,000 clinic visits are made each year; senior residents with the assistance of interns and assistant residents conduct the clinics. An attending physician is assigned to each clinic for consultation and supervision of teaching.

The hospital library is open every day except Saturday and Sunday, and a full-time librarian is in charge. A key is available to the house staff at all times. The library contains 5,575 volumes and receives 158 periodicals.

Housing, recreation

The hospital maintains two staff houses for unmarried interns and residents. Married house staff members live off the hospital grounds

and are given an additional \$50 stipend a month for this purpose. When on night call, the married physicians use one of the "on call rooms" in one of the staff houses. The office of the director of medical education maintains listings of suitable available apartments.

Television lounges, swimming pool, billiard room and ping pong are recreational facilities on the hospital grounds and are available to off-duty interns and residents.

Socially, there are dances, informal parties and meetings of the wives' club.

Akron and nearby Cleveland offer many entertainment facilities such as theatrical and concert performances, fine restaurants, big league baseball, professional football, boating, and other activities for members of the house staff.

Clinico-Pathological Conference

Akron City Hospital

A 35-year-old white woman entered the hospital complaining of pain in the legs.

The patient stated that for three weeks she had felt weak and tired and had noticed afternoon and night sweats. At the same time she developed sharp pains in both legs, but predominantly in the right, extending from the hips to the ankles in varying and irregular pattern. There were also several episodes of cramp-like lower abdominal pain. These symptoms were relieved by codeine and aspirin.

There was a history of infectious mononucleosis six years before. Otherwise, the past medical history was essentially negative.

Examination

Physical examination revealed a well-developed, well-nourished, alert

white woman in no acute distress. Temperature was 102.6°F, pulse rate 106 per minute, respiratory rate 28 per minute and blood pressure 112/70 mm Hg. The skin was warm and dry. The head and neck were essentially negative. The lungs were clear.

The heart was slightly enlarged to the left. There was normal sinus rhythm with an apical rate of 106 per minute. A very soft grade I systolic murmur was heard at the apex. The first mitral sound was accentuated. The second pulmonic sound was more prominent than the second aortic.

The liver was palpable one finger-breadth beneath the right costal margin and was non tender. There were palpable non tender bilateral inguinal lymph nodes. Pelvic and rectal examinations were negative.

The extremities were negative with no demonstrable weakness, tenderness, or limitation of motion. Neurological examination was not remarkable.

Laboratory

The red blood count was 3,220,000 per cu mm with 9.5 gm of hemoglobin (62%). The white blood count was 7,800 with 69% neutrophils and 31% lymphocytes. The sedimentation rate was 60 mm in 60 minutes. The urine was slightly cloudy, yellow and acid, with specific gravity of 1.022, and negative for albumin and sugar. The urinary sediment contained 1-2 epithelial cells per high-power field. The VDRL test was nonreactive. Two skin tests for trichinosis were negative. Repeated smears for L. E. cells were negative. The heterophile agglutinin titer was 1:7. C-reactive protein was 4 plus and antistreptolysin 0 titer 12 Todd units. The serum rheumatoid agglutination test was negative. Serum agglutinations for brucella, typhoid and paratyphoid were negative.

A lumbar puncture was done and clear cerebrospinal fluid was obtained. The test for globulin was negative. The total protein was 15.5, sugar 53 and chlorides were 717.6 mg%. The cell count was 0 per cu mm. A culture was later reported as negative.

The patient was given symptomatic treatment. The temperature varied daily from 100° to 102° F. A

second examiner found definite weakness in the muscles of the right leg. The deep tendon reflexes in the right leg and arm and the superficial abdominal reflexes on the right side were decreased. The spine was described as rigid, especially in the lower thoracic and lumbar segments.

Repeated blood counts and sedimentation rates yielded results similar to those given above. Three blood cultures produced no growth.

Several blood smears were negative for malaria. Smears for lead stippling were negative. Serum protein was 5.6 gm% with an A/G ratio of 3.3/1 and the protein-bound iodine was 4.8 micrograms percent. The tests for cold agglutinins and cephalin flocculation were negative.

Impression

An electrocardiogram revealed regular sinus rhythm with auricular rate of 112 per minute, PR interval of .16 and QRS interval of .06. Impression: "Position of heart is vertical. Sinus tachycardia. Normal electrocardiogram with marked counter-clockwise rotation."

A muscle biopsy was performed and was reported as negative.

The patient was given prednisone (later changed to hydrocortisone), whole blood and meperidine. Approximately six weeks following admission a palpable lymph node in the left submandibular region was noticed for the first time.

On the 46th hospital day an operation was performed.

Discussion

DR. MARVIN J. SAKOL: This is the protocol of a 35-year-old woman with a three-week history of pain in the legs, anemia, reticuloendothelial hyperplasia and fever.

Pain in the extremities can be caused by pathological process in the bones, joints and periarticular structures, muscles, nerves, blood and lymph vessels or skin, or it can be referred from a diseased viscus. On the first examination no neurological abnormalities were discovered, but a second and presumably later examiner found definite weakness in the muscles of the right leg and arm and decrease of the superficial abdominal reflexes. This would tend to place the pathological process in the bone, either localized or systemic, or in the nervous system. These sites are not mutually exclusive.

I shall come back to the neurological findings in a moment, but I think that at this point the x-rays may offer some help.

DR. FREDERICK A. RUOFF: The lumbar spine and pelvic films fail to reveal any gross architectural change, infiltrative lesion or local areas of demineralization of the bone. There are, however, arthritic changes of the sacroiliac junction and of the lumbosacral junction.

There is space narrowing and also hypertrophic spurring of the lumbosacral junction, particularly on the left, and the sacroiliac joints show moderately advanced hypertrophic arthritis with sclerosis of the iliac

margins of the articulations.

On the abdominal film, which is included in our lumbosacral study, no tumor masses are identified. The kidney outlines appear normal. The liver is not enlarged; however, it does approach the iliac crest. The spleen is not enlarged. There are no abnormal calcifications.

The P-A stereo and lateral projections of the chest show mild increase of the markings into the bases of the lungs, but there is no evidence of any acute process in the lung fields. No infiltrative lesions are found. The vascular shadows and the peribronchial changes are normal for a patient of this age. The heart is not enlarged and the great vessel shadows are not unusual. Diaphragms show a normal contour. The rib cage shows no evidence of infiltration. The scapula and shoulder girdle are normal. The trachea is in the midline. No soft tissue tumors or calcifications are seen in the neck.

Anemia

DR. SAKOL: I intend to come back to the neurological findings in a bit, but let's leave them for a moment and take up the problem of the anemia. As I have said many times, probably all changes in the human body are reflected in the blood. Some of them are too subtle for us to utilize in diagnosis, but by the time you find anything as gross as anemia your best chance for diagnosis is by investigation of the anemia.

This from the data presented is a normochromic, normocytic anemia, the causes for which are a sudden loss of blood, destruction of blood or lack of blood formation.

In this case we can forget the first, the sudden loss of blood, for lack of evidence. There is no evidence of increased blood destruction, such as jaundice, increased serum bilirubin, or increased urinary or fecal urobilinogen, nor of the increased production which often accompanies increased destruction, such as polychromasia, reticulocytosis or bone marrow normoblastosis.

Leukemia

Thus by exclusion or lack of evidence we are left with anemia due to a lack of blood formation. This type of anemia is made up basically of three major groups, the aplastic-hypoplastic group, the simple chronic anemia associated with various systemic diseases, especially renal disease, tuberculosis, malignancy and chronic infections, and the "myelophthitic" anemias (which probably are not truly myelophthitic in nature) resulting from metastatic carcinoma, lymphomas and leukemias.

Myelosclerosis and marble bone disease I omit because of the lack of splenomegaly and the x-ray findings. The absence of a leuko-erythroblastic blood picture militates against a metastatic carcinoma but does not completely rule it out. Because no mention is made of

petechiae or purpura, and no platelet counts are given, and since the white count is normal, I am forced to rule out aplastic anemias, except perhaps the rare pure red-cell aplasia, leaving for serious consideration in this group only leukemias, lymphomas and a chronic infectious process such as tuberculosis. Since no bone marrow report is included, we cannot make the diagnosis of leukemia.

Lupus

Another disease which might also fit the picture is disseminated lupus erythematosus, which may present such signs as irregular fever, glandular enlargement, hepatic enlargement and anemia.

However, cardiac manifestations, leukopenia, renal damage and joint involvement, at least one of which should be found, are absent here, and furthermore no L.E. cells are demonstrated.

Lymphoma

One more aid to diagnosis is available, the lymphadenopathy. Although I am seldom impressed by inguinal adenopathy, the presence of a new enlarged single node, particularly a firm, non tender one, is of great significance, and immediately brings to mind that group of lymph node diseases thought by some to be neoplastic and by others to be infectious, namely the lymphomas.

These include reticulum cell sarcoma, lymphosarcoma (either

(lymphoblastic or lymphocytic), Hodgkin's disease, giant follicular lymphoma, clasmatocytic lymphoma, monocytoma and Hodgkin's sarcoma. Whether any fundamental difference exists among members of this group, especially between lymphosarcoma and leukemia, is somewhat doubtful, because many will have at least a transient leukemic phase at one time or another, particularly if x-ray therapy has been given.

It is possible in this case that the illness called infectious mononucleosis six years before could have been a transient leukemic phase of a lymphoma, with a spontaneous remission.

Node enlargement

In the differential diagnosis of lymph node enlargement we must consider in addition acute lymphadenitis, tuberculosis, syphilis, infectious mononucleosis, leukemia and metastatic carcinoma.

The absence of an infected focus in the neighborhood of the affected glands as well as the absence of tenderness and local heat pretty well rule out local causes of adenopathy in this case. We have nothing on which to base a diagnosis of syphilis. I have never seen a patient with infectious mononucleosis this sick for so long. Tuberculosis is quite possible, especially since the submandibular area is involved. The absence of chest findings is against this diagnosis, as is the absence of calcification in the node, but this does not

entirely rule it out. A tuberculin skin test might have been helpful.

Boeck's sarcoid bears a great clinical resemblance to Hodgkin's disease as well as to tuberculosis, but anemia is uncommon, and in the present case there are no miliary pulmonary findings, the eyes and the lacrimal and parotid glands are not involved and no punched-out areas in the small bones are reported. The serum proteins also were not elevated. All of these things are against the diagnosis of sarcoid, but still do not positively rule it out.

Most common

Now, how can we tie things together to arrive at a reasonable diagnosis? You will notice throughout the discussion of possibilities three things keep popping up which are never decisively ruled out, namely tuberculosis, metastatic malignancy and lymphoma. Any can attack the central nervous system, cause anemia or produce reticuloendothelial hyperplasia and may pursue a febrile course.

The most common disease of the vertebral bodies with nervous system involvement is probably tuberculosis. It may lead to partial destruction and collapse, particularly of the anterior part of the vertebrae, with resulting gibbus. Usually there is local tenderness during the active process. As mentioned before, there is evidence against tuberculosis in this case, but it is not decisively ruled out.

Malignant

Second in frequency is metastatic carcinoma. It is important to note that osteophytes, signs of hypertrophic osteoarthrosis of the spine, are often formed on the anterior surface of a vertebra bearing a small metastatic cancer. Most frequently the primary site is in the breast, kidney or lung, and no corroborating evidence for these sites is offered in the protocol.

Lymphoma may involve either the vertebrae directly or the central nervous system or both. It does so in from 10 to 25 percent of cases. In some there is a direct invasion of the vertebrae from lymph nodes adjacent to the spine. This may cause vertebral collapse and direct mechanical pressure upon the cord. More commonly, extension occurs from retroperitoneal, mediastinal and intrathoracic masses by way of the lymph spaces of the nerve roots through the intervertebral foramina and into the epidural space. Large epidural deposits of lymphoid tissue can completely or partially encircle the cord and produce compression.

In some cases, and probably much more commonly than has been appreciated, mechanical obstruction of vessels may occlude the blood supply and produce thrombosis and myelomalacia. Most epidural lesions fall into this group. This is the reason why, when epidural masses produce paraplegia, even though the mass is removed, the patient usually does not walk again,

or at least is not completely cured.

Sparling and others have emphasized that the rapid development, within a few days to a few months, of a paraplegia with corresponding sensory loss in association with pain in the back or radicular pains should always suggest the possibility of a spinal epidural lesion of a lymphomatous nature.

In summary, then, I believe that this woman had as her primary disease a malignant lymphoma. The differentiation of the lymphomas is a microscopic problem rather than a clinical problem.

Fever

DR. SIMON A. SCHLUETER: How do you account for the constant daily fever?

DR. SAKOL: Whenever a lymphoma is generalized, particularly when bone marrow involvement is present, fever is almost a universal accompaniment. Now it's true that in many cases there is the so-called Pel-Ebstein type of fever. The patient remains febrile for ten days, a couple of weeks or a little longer, then is afebrile, and then has recurrence of the fever. But in many cases, once the disease has become disseminated the fever remains continuous, usually with afternoon spikes. This is an ominous prognostic sign.

DR. ALEXANDER P. ORMOND: What would your diagnosis have been if you had not had the appearance of this submandibular lymph node?

DR. SAKOL: Any time there is a normochromic, normocytic anemia or a macrocytic anemia, a bone marrow examination must be done. In view of the constant febrile course that this woman had, I feel very definitely that, on supravital staining at least, lymphomatous cells would have been found in the bone marrow, and my diagnosis probably would have been the same.

DR. H. WILLARD ALLISON: I would like to ask why you have not mentioned subacute bacterial endocarditis as a possibility, and also whether you considered multiple myeloma.

Evidence

DR. SAKOL: I did consider both those diagnoses. I eliminated subacute bacterial endocarditis because of lack of evidence of embolic phenomena, because the cardiac findings as recorded in the protocol did not impress me as being indicative of any heart disease and because the spleen was not enlarged.

Multiple myeloma I considered also. If this had been the protocol of a 75-year-old man with virtually the same history, I would have considered it very strongly. A woman of 35 is definitely out of the usual age group with multiple myeloma. However, being basically a lumpner rather than a splitter, I would consider multiple myeloma as a form of subleukemic plasma cell leukemia and thus not too far different from the conditions mentioned.

DR. H. VERN SHARP: Do you think that in view of the neurologic changes there might have been a change also in the spinal fluid?

DR. SAKOL: When there is a complete block of the spinal fluid, usually one finds an increase in protein, pleocytosis and xanthochromasia. In the presence of an epidural mass causing only partial occlusion or with resulting thrombosis of the vessels and myelomalacia, or with definite infiltration into the cord, there may be no diagnostic spinal fluid changes. Later spinal fluid examinations might have shown some changes.

DR. EARL C. HERSHBERGER: Do you think the patient could have had miliary tuberculosis? Perhaps there was breakdown of a tuberculous lymph node, or there was some other caseous lesion such as in the lumbar spine, with periosteal spread up the vertebral column producing the back spasm, and then a lymphatic and hematogenous spread. The chest films were negative, but early miliary tuberculosis often cannot be recognized by x-ray examination.

Incomplete

DR. SAKOL: In hematologic disease, tuberculosis is as much the great mimicker as syphilis used to be in general internal diseases. As I mentioned in the discussion, I was never able to eliminate tuberculosis completely. Some of the things that would have helped to establish that diagnosis would have been a tuber-

culin skin test or demonstration of the tubercle bacillus. The chest x-ray of course did not demonstrate any tuberculosis. Only on this basis and on the basis of probability did I eliminate tuberculosis in favor of a lymphoma, but it's true that tuberculosis always fits into the differential diagnosis.

DR. ROBERT A. McDOUGAL: Would the low serum globulin and total protein be against the diagnosis of lymphoma?

DR. SAKOL: It certainly wouldn't direct your attention to a lymphoma. In lymphomas, however, the serum proteins are not rarely lowered because of hypoalbuminemia, but will

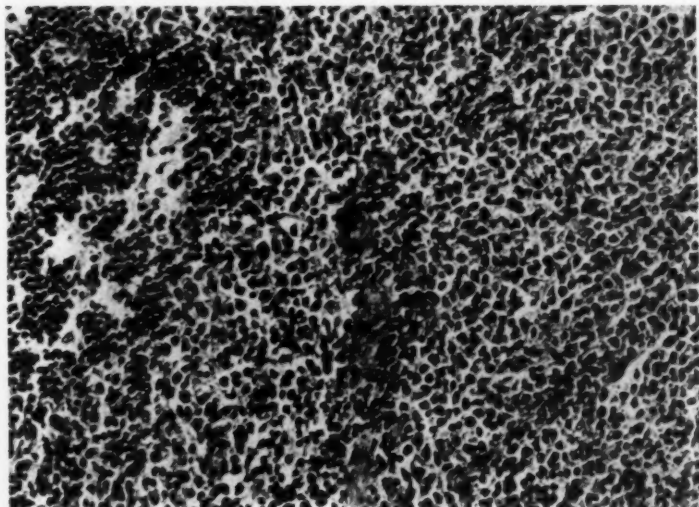
usually fall into the normal range. Of course it would be nice from a diagnostic viewpoint to have an elevated serum globulin, but all patients do not fit into the same picture.

Procedure

DR. LLOYD CATRON: The operation performed was excision of the enlarged left submandibular lymph node. A node 2 by 1.5 by 1 cm was removed. Microscopically it proved to be a large-celled lymphoblastoma (lymphoblastic lymphosarcoma) (Fig. 1). There was almost complete destruction of normal architecture with infiltration beyond the capsule.

The patient received 25 mg of

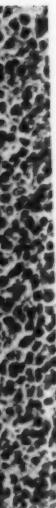
Fig. 1. Lymphoblastomatous transformation of submandibular lymph node. Some of the few remaining small lymphocytes appear at the upper left.



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nitrogen mustard intravenously. She was under x-ray treatment when it was found that the white count had fallen to 850 and the platelet count to 30,000 per cu mm, and so the treatment was discontinued.

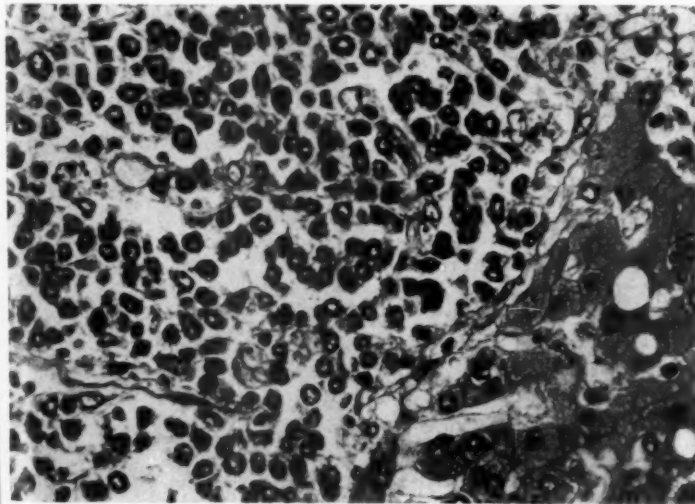
Later x-ray films disclosed rarefaction, rather widespread but spotty, in the bony pelvis. A sternal marrow examination revealed neoplastic cells, very largely necrotic, with practically no normal bone marrow cells found in the portions examined. The patient was sent home on prednisone and one of the newer sulpha drugs. Terminally there were signs of involvement of

the cranial nerves, both sensory and motor. The patient died four months after entering the hospital.

Autopsy

At autopsy the skin was pale except for moderately extensive hemorrhages in the sacral region and in the thighs. The lymphoblastomatous infiltration was most massive in the abdominal and pelvic retroperitoneal tissues. Enlarged, matted lymph nodes and infiltrated supporting tissues formed plaques extending 6 to 8 cm bilaterally from the midline. The bony pelvis, spine, sternum and ribs were extensively involved, with

Fig. 2. Portal zone in the liver with hepatic cord cells on the right. High power view of neoplastic infiltration.



formation of irregular neoplastic excrescences. No subdural infiltration or compression of the spinal cord was found. The extent of cranial involvement could not be determined because permission to examine the head was denied.

The liver was slightly enlarged, weighing 1980 gm. Infiltrations occurred chiefly in the portal regions (Fig. 2), but some had become confluent and had replaced groups of hepatic lobules, with extensive necrosis.

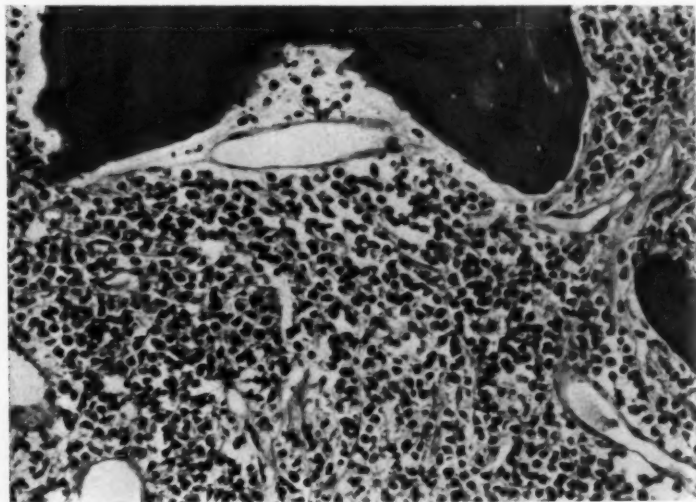
The spleen weighed 190 gm. Small clusters of tumor cells were found in the Malpighian bodies. In addition, there were moderately extensive hemosiderosis and slight ex-

tramedullary hematopoiesis.

Lymphomatous infiltrations caused stiffening of the gastric wall with formation of giant rugae. Similar but smaller lesions were found in the small intestine, and there was minor involvement of the adrenals and the kidneys.

DR. SAKOL: The use of nitrogen mustard was of course the treatment of choice. The course of the disease was somewhat typical for a lymphoma of the lymphosarcomatous type, except perhaps for one thing. The fact that this woman did not respond to nitrogen mustard or to x-ray therapy suggests that at least a component of this may have been reticulum cell sarcoma. In other

Fig. 3.—Lymphoblastomatous replacement of sternal bone marrow.



words, most lymphosarcomas will respond fairly well for a short period of time. However, the reticulum cell sarcoma group does not respond to these medications as well. In such cases it may be worth a trial of 6-mercaptopurine. In addition, I presume that this case occurred before the availability of CB 1348 (chlorambucil). Certainly at present we probably would have given her a trial on this at some stage of the disease.

Systemic disease

DR. ORMOND: I saw this patient in consultation and she was a very interesting problem. Here we have a young woman who had a systemic disease which began with myalgia, arthralgia, fever, malaise and weight loss. She had a normochromic, normocytic anemia, an elevated sedimentation rate and many findings that pointed toward one of the collagen diseases, particularly systemic lupus erythematosus. The fact that she did not have a positive L.E. cell test is unimportant because only 60 percent of proven cases of systemic lupus have positive L.E. tests.

The albumin-globulin ratio in the blood was not reversed as it is in the collagen diseases. The random biopsy of the muscle of the leg was negative, but it is positive only in 8 percent of proven cases. When you take a biopsy from an actual lesion of arteritis or systemic lupus

you will have a diagnostic biopsy in only 40 percent of proven cases. Central nervous system disorders may be early manifestations of a collagen disease. Until the appearance of this lymph node under the mandible we had no evidence of lymphoma, although we looked for lymph nodes and an enlarged spleen repeatedly.

We are up against a problem of treatment which is yet unsolved. This case is an example of the futility of the chemical and radiologic treatment of acute lymphomas. Treatment is more theoretical than practical.

DR. SAKOL: Just one comment on the theoretical versus the practical aspect of the treatment of lymphomas. Certainly one must realize that there are many diseases that we don't cure. We don't cure diabetes. We don't cure pernicious anemia. There is a host of diseases we don't cure. But if you can give a patient a comfortable, happy, productive existence, whether for a few months or many years, it is very worthwhile.

There are a few lymphomas, particularly of the reticulum cell group, that will not respond to any treatment. The vast majority, however, will respond for a period of time, and because we never know when the "cure" will be coming along, I think that you have to treat all of these people when they have symptoms.

Otorhinolaryngology:

Residency and Private Practice

A resident looks at the past and the future of ENT and sees a bright specialty that is expanding rapidly in at least two directions.

José A. Aquino, M.D.

There are medical men who honestly believe that the ENT man belongs to a dying breed. They have all but ordered wreaths and lined up pall bearers. But like the newspaper that was "premature" in publishing Mark Twain's obituary, they are mistaken.

Not only is otorhinolaryngology very much alive, but recent advances in otology give promise of the ENT specialty becoming two, otology and rhinolaryngology. In a sense, this reverses the origin since, historically, otorhinolaryngology developed from three different disciplines.

The early otologists were primarily surgeons whose basic tools were the scalpel, syringe and trephine. Laryngologists, on the other hand, were interested in the diseases of

the chest. In time they extended their field to include the larynx, nose, paranasal sinuses and nasopharynx. And rhinology is mentioned in 350 B.C. when Sekhet-enanch was physician to Sahura, one of the pharaohs of the fifth dynasty. A slab of limestone on the king's tomb shows a drawing of the physician and his wife, and bears this inscription: "He healed the king's nostrils."

Politzer

Adam Politzer is a name that every otologist should remember, for he is known as the Grand Old Man in the field. In 1861 he was appointed the first "dozent" in otology at the University of Vienna and was promoted first professor in 1870. In

1873 he and Josef Gruber were named directors of the first aural clinic.

Each man was assigned a room with ten beds; these rooms served as ward, outpatient department, operating theater and lecture hall. It has been estimated that the clinic handled as many as 15,000 patients a year. And it was here that modern otology was born.

Dr. Politzer was a brilliant man who could lecture in four languages. His reputation attracted foreign doctors, more than 7,000 coming to the clinic for instruction through the years. (It is entirely possible that a few of these Politzer-trained men are still alive in this country.)

Laryngology

Manuel Garcia is considered the father of laryngology because of his discovery of indirect laryngoscopy. A Spaniard, he was not a medical man but a voice teacher with a keen interest in the structure of the larynx.

About The Author

After receiving his MD and serving an internship in the Philippines, the author came to the U.S. under the Exchange Visitors Program to take postgraduate training. Following another internship year at the Holy Name Hospital, Teaneck, N. J., he completed three years of residency at the Martland Medical Center, Newark, New Jersey. At present he is serving a final year of oncology residency training at the American Oncologic Hospital in Philadelphia. In April, 1954, his article comparing a Philippine internship with his internship in the U.S. was published in the *Journal of the Student American Medical Association*.

On vacation in Paris in 1854, Senor Garcia was strolling in the gardens of the Palais Royale when he noticed the windows of the colonnaded quadrangle were acting like large mirrors, reflecting sunlight at angles. A thought struck him: Couldn't light be reflected into the larynx in just such a way?

He bought a long-handled dental mirror and a hand mirror, and hurried back to his hotel room. Standing next to the window, he held the dental mirror against his uvula and directed a ray of sunlight on it with the hand mirror. His idea worked. There was an image in the hand mirror reflected from the dental mirror. He could see his glottis and trachea.

This simple discovery was the beginning of laryngoscopy. Senor Garcia died in 1906 at the age of 102, having lived long enough to see his discovery become the key instrument in one of the medical arts.

Turck started laryngology instructions in Vienna in 1861. In 1870 a

laryngologic clinic was started with Von Schrotter, his disciple, as chief. Rhinology was included in the nineties and in 1899 a university clinic of laryngology and rhinology was created with Chiari at its head. It was under Chiari that the specialty became more surgical than medical. In 1919 the university chairs of laryngology and otology were combined to form the single specialty, otorhinolaryngology.

Today, the scope of the specialty is broad. The American Board of Otolaryngology requires a candidate to be proficient in the applied basic sciences, fundamental to the intelligent practice of otolaryngology. Included are anatomy of the ear, nose, throat, neck, chest, esophagus, nervous system, gross pathology and histopathology, bacteriology, physiology, didactic otolaryngology and fundamentals of surgery.

Before the day of residency programs ENT training, like other special studies, was mainly by preceptorship; one had to assist an older specialist and learn from him. The training was apt to be a long and slow process and of a scope limited by the preceptor's practice.

The preceptee was expected to think like his preceptor, accepting his older colleague's ideas whether he agreed or not. (I think there must be a special place in heaven for the patient men who survived this training.)

Because of its inherent limitations this system produced few special-

ists. With the advent of residency programs, however, the training period was formalized; residents were taught by a group of men having different backgrounds, ideas and special interests. In this way the modern-day resident can obtain a well-rounded training.

My own three-year residency was served at a medical center where the service for the past fifty years has been known as the Head & Neck service. (Dr. Henry B. Orton, emeritus chief-of-service, always insisted on calling it that.) Included within it were: rhinolaryngology, bronchoesophagology, otology, maxillo-facial, plastic surgery, ophthalmology, neurosurgery and dental, each headed by a qualified man and a member of his particular specialty board.

Because of its progressive character, the level of training is determined by the resident's grade: junior resident to chief.

First year

In his first year, the resident has limited duties. He attends clinics and lectures given by his senior colleagues or members of the attending staff. He is responsible for the histories and physical exams on all admissions in collaboration with the intern whom he is expected to teach. The junior resident does most of the clinical diagnostic procedures, including anterior and posterior rhinoscopies, otoscopy, indirect laryngoscopies, transilluminations, audiometry and nasopharyngoscopies.

The junior resident also acts as liaison officer between his service and other services of the hospital. He is expected to follow up x-ray studies on all patients in the wards and look at slides of all operative specimens, in this way correlating clinical and pathological findings.

He also learns fundamental surgical techniques, doing tonsillectomies and adenoidectomies, submucous resections, and removals of minor benign growths in the head and neck regions. He changes most of the dressings in the wards and answers all emergency calls to the receiving room. (With the aid of his senior resident, he repairs lacerations of the head and neck.)

Second

In the second year the resident works with his junior resident in both the clinics and the wards. Audiometry is his responsibility. In cooperation with the technician in the hearing center he learns the various audiometric patterns of the different hearing problems.

Although surgery is mostly aural, he also is exposed to mastoidectomies (simple, modified radical and radical), sinus surgery and occasional rhinoplasties which he shares with the plastic surgery resident.

Third

The third year, as chief resident, he is the "big shot" of the department. He supervises in the wards and clinics and gives instructions to

the student nurses. When problem cases are discussed at interdepartmental conferences, the chief resident is expected to voice the opinion of his department.

He gets the cream of the surgery, all the radical operations involving head and neck malignancies; radical neck dissections, hemiglossectomies, hemimandibulectomies, maxillectomies, etc. This is the challenging experience he has been preparing for, the reward that makes up for all the sacrifices made by him and his family. (I think credit should be given to the family whom the resident seldom sees. It is their understanding that helps him get through his training years.)

The chief resident does endoscopy both for therapeutic and diagnostic purposes. Bronchograms and sialograms also are his responsibility. Often the ENT chief resident will do diagnostic bronchoscopies in cooperation with the medical service.

During my training I acted as chief resident for two years, a lucky break for me. And I am grateful to all those who helped me, especially members of the attending staff.

Busy

As I look back on my training and try to remember what a typical day was like, one descriptive word comes readily to mind: "busy." ENT residents at most centers have a lot in common with perpetual motion machines.

The morning usually began with

rounds on the acutely ill. Then, three days a week, the resident had the next four to six hours in the operating room. Late, hurried lunches coupled with the tension built up while in the operating room was a fine way to get a peptic ulcer.

In the afternoon came more detailed rounds. Diagnostic workups were ordered, laboratory results reviewed, dressings changed. At the end of the day the resident was beat, grateful for the chance to sink into a lounge chair to rest both body and brain. Some times the lounge chair had to be passed up as the resident had to attend lectures and demonstrations conducted by members of the attending staff.

Night calls

Every second night the resident was on call.

"Dr. Jones . . . Dr. Jones . . ." Summoned by the public address system, Jones picked up the phone. He was wanted in the receiving room . . . a patient with epistaxis. Resident Jones hurried down, inserted packings, anterior or posterior, and ordered medications.

Later on would come another call. A patient in the medical ward was having severe dyspnea; tracheal catheterization was performed and the resident arranged for an emergency tracheotomy and notified the attending physician.

If the night was a Friday, you could always count on a "fish" call or two—a patient with a sore throat

who believed he had a fishbone lodged in his pharynx. The resident would check and nine times out of ten, find no bone.

And then, of course, there were always those patients who had suffered pain for weeks but decided in the middle of one night that they'd better see a doctor. That's when you were ready to flip. But you couldn't. You treated the patient with understanding which you didn't always feel, told him to come in the morning for a thorough examination.

One night, however, was always special. This was when the residents met with the attending staff for journal club meetings. The latest otolaryngological articles were discussed as well as other medical and surgical topics. After an informal discussion came what was to many of us the *best* part—refreshments. Wives of the attending men were usually on hand to serve sandwiches and beer. All of us enjoyed those meetings.

Attendance at other clinical meetings was always urged on us by the attending staff, some of whom even volunteered to take emergency calls so that all of us could go. The staff encouraged the writing of scientific articles, allowing us to use their interesting private cases. I wrote or co-authored five articles which were published during my residency, and twice won a third prize in a competition sponsored by the county pathological society.

Alive

So much for the ENT residency. As I have already stated, it is unfortunate that some physicians have the mistaken notion that otorhinolaryngology is a dying specialty. I don't propose to give a long list of reasons why they are wrong, but I want to stress these points:

- According to a recent report, the American Board of Otolaryngology examines about 200 candidates a year and always has a waiting list of candidates.

- According to Dr. Dean M. Lierle, Secretary of the Board, the number of applicants for residencies has been on the increase for the past ten years.

- At last count, there are 116 hospitals approved for residency training in otolaryngology which can accommodate 447 residents. This represents an increase of 25 percent over the previous year (compared to a less than 10 percent increase in total residency openings).

Do these facts add up to a "dying" specialty? I don't think so. One need only review one of the journals in the ENT field to see the lively interest in the specialty and the advances being made.

The immediate "cause of death" is attributed to discoveries in chemotherapy and the development of antibiotics. However, as otolaryngology is not limited to surgery but has a medical aspect, the effect was not as great as is often supposed.

While it is true that the new

"miracle" agents practically did away with complications resulting from acute infections of the ears, nose and paranasal sinuses, they did not eliminate chronic infections, which are in fact on the increase. And it is these infections that give rise to serious complications.

Myringotomy

There is an increase in the incidence of otic meningitis, chronic mastoiditis and impaired hearing. We find impaired hearing in ears where the tympanic membrane appears almost normal. But behind this drum are serious infections.

It is amazing how much hearing can be saved in many cases by a timely myringotomy. The trouble is that some physicians outside the ENT specialty oppose any myringotomy as "unnecessary."

In the past few years there have been remarkable advances in otology. Following World War II hearing centers were built in many parts of the country, and it is in these centers that tremendous diagnostic and rehabilitative work is being done.

Otosclerotics are greatly benefited by surgical procedures available today. Before the advent of the fenestration operation these patients had only one recourse, lip reading. Often the deaf suffer even worse personality changes than the blind, and thus many a young otosclerotic was lost as a vital person in the family and the community.

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to many of your antibiotic
treatment problems



Wyeth

Philadelphia, Pa.

THESE PROBLEMS:

- **resistant infections, especially staphylococcal**

CYCLAMYCIN—effective in many infections caused by bacteria resistant to erythromycin, the tetracyclines, penicillin, streptomycin; particularly useful against many resistant staphylococci (about 70–75% of erythromycin-resistant staphylococci are susceptible)

- **common infections**

CYCLAMYCIN—effective in many of the common infections due to gram-positive organisms (staphylococci, streptococci, pneumococci); also against some gram-negative organisms (gonococci, *Haemophilus influenzae*)

- **untoward reactions**

CYCLAMYCIN—has not caused serious sensitivity or toxic reactions such as anaphylaxis, micrococcal enteritis, or blood dyscrasias

THESE ADVANTAGES:

- **reliable blood levels—high, rapid, sustained**

- **readily and reliably absorbed (stable in gastric secretions—no enteric coating to interfere with absorption)**

- **well-tolerated**

SUPPLIED:

Capsules, 125 and 250 mg., bottles of 36. Oral Suspension, 125 mg. per 5 cc., bottles of 2 fl. oz. Also available: Oleandomycin Phosphate, Wyeth, for intravenous administration—as a dry powder for reconstitution; each vial contains 500 mg. of oleandomycin base as the phosphate salt.

It took the ingenuity of the otologist to help these people. Dr. Julius Lempert advocated the fenestration operation and Dr. Samuel Rosen revived the stapes mobilization, both of which are widely used today.

Drama

I don't think any ENT specialist ever outgrows the drama played out in the operating room or becomes blind to the look of wonder and appreciation in the eyes of a patient who suddenly can hear once again. This is reward enough for the surgeon.

I recall one case in particular, though it may not properly come under the heading of otolaryngology. The patient was a woman with cancer of the larynx. I came into contact with her because it was customary for our service to refer all postoperative laryngectomies to a speech class.

It was some time after her operation that I had occasion to speak with her. It suddenly dawned on me that despite the fact that she had no larynx, she was speaking clearly and fluently. I was amazed, and asked her how she had learned to talk again. Her explanation is something that I shall never forget.

Faith

"When I came to the hospital and was told that I had cancer in the voice box, I thought that was the end of me," she said. "The doctors told me that in order to save

my life I would have to have my voice box removed.

"I didn't know what to do. I was desperate. What was the use of being alive if I could not talk. I wanted to seek refuge but didn't know where to turn. Then it dawned on me. Him. He could help me.

"I prayed hard that night and the next day, the day of the operation. I still didn't know if I wanted to go through with it. But I did. My larynx was removed. Then came recovery and the problem. I couldn't talk. I thought, how will I live outside the hospital? How will I face people?

"I was discharged and I went to church every day to thank Him. One day I made up my mind to speak again and I prayed to God. I wanted to join the other people in saying their prayers. I wanted to talk again, not only for myself but for Him, so that I could tell other people about His help.

"Then I heard it. My voice. I could hear myself saying the Lord's Prayer with the others in church. I could talk again."

She was in tears when she finished her story. My throat was constricted and my eyes were wet, too. Others in the room at the time were reaching for their handkerchiefs.

The point, of course, is that speech rehabilitation supported by this kind of strong faith and purpose can bring to the ENT man the deepest satisfaction possible in his work.

Role

At this point I will try to answer a question of vital importance to the young doctor considering ENT training. How does the otolaryngologist fit into today's medical structure—what does he have to offer?

One of his most important functions is giving a helping hand to other specialists. As medicine has grown more complex, cooperation among specialists has become a necessity.

The ENT man can help the internist by spotting systemic diseases which show oral manifestations — avitaminosis, pemphigus, leukemia. Sometimes the otolaryngologist is the first to see these patients. And hypertensive cases may come to his office because of epistaxis. He will also take masses in the neck for biopsy to confirm or deny the diagnosis of TB, sarcoidosis or lymphomas.

He can assist the allergist in both diagnosis and treatment. He can examine the patient's nose for the presence of an allergy, take nasal smears, and collect antral and bronchial washings for the preparation of vaccines.

The ENT specialist can help the thoracic surgeon in his diagnosis of lesions in the thoracic cage. Bronchoscopies, biopsies and bronchial washings all come under this heading. In such procedures the otolaryngologic endoscopist should view the lesion with the eyes of a thoracic surgeon and thus help evaluate the

operability of the case.

Acute infections of the ear, nose and throat, and foreign bodies in the ears, respiratory and food passages are common in children. The otolaryngologist can work hand in hand with the pediatrician in these cases.

Working with the general surgeon, the ENT specialist can do emergency bronchoscopies in the case of aspirations immediately postoperative, and laryngoscopies for the checking of the vocal cords in thyroid patients both preoperatively and postoperatively.

There are a number of programs today whereby doctors can receive training as teachers and research physicians in otorhinolaryngology. For example, the National Institutes of Health has an outstanding program to help develop teachers and research workers.

Practice

Next comes the question of location and how it affects the ENT specialist's practice. The area has a direct effect. The practitioner has to adapt himself to the requirements of the people in his area, to the predominant otolaryngologic problems, to the limitations of instruments and facilities available in nearby hospitals.

In smaller cities and towns the ENT man is expected to do the general ear, nose and throat work. This will include the T & A's, SMR's, myringotomies, etc. This is

in contrast to what we find in the large cities.

There the tendency is supra-specialization. Some men will devote their practice to some particular segment such as otology, laryngology, broncho-esophagology or head & neck surgery. Some of these specialists have become well known through their achievements: Lempert and Rosen; Chevalier Jackson, father and son, for their work in broncho-esophagology, and Henry B. Orton for laryngology.

Income

While it is true that you can't measure your rewards in medicine in terms of money, it is a factor that must be considered. Here the ENT man is found to hold his own. Though his expenses are high, it is said that most city ENT specialists have large waiting rooms, fully occupied.

The examination of candidates started in 1916 when the American Academy of Ophthalmology and Otolaryngology appointed an examination committee of three. The number of members was doubled the next year and in 1924 the committee was enlarged to include two representatives from each of the following societies: The American Laryngological Association; The American Otological Society; The American Laryngological, Rhinological and Otological Society; The Ameri-

can Academy of Ophthalmology and Otolaryngology, and the Section on Laryngology, Otology and Rhinology of the American Medical Association.

In brief, Board requirements include a general internship of one year and clinical training in otolaryngology which may be obtained in any of the following ways:

- Three year residency or fellowship in otolaryngology approved by the Council of Medical Education and Hospitals of the AMA.
- Two year approved residency or fellowship in otolaryngology or a three year approved combined residency or fellowship in otolaryngology and ophthalmology, provided two years have been in otolaryngology and have been preceded by at least one year of approved residency training in surgery or medicine, or by an additional year in an approved internship. After July 1, 1960, one year of general surgery will be required.

For further information you may write to: D. M. Lierle, M.D., Secretary-Treasurer, American Board of Otolaryngology, University Hospitals, Iowa City, Iowa.

As I said at the beginning of this article, otolaryngology is not a dying specialty. It is a changing and challenging field in which the medical man can derive real satisfaction.

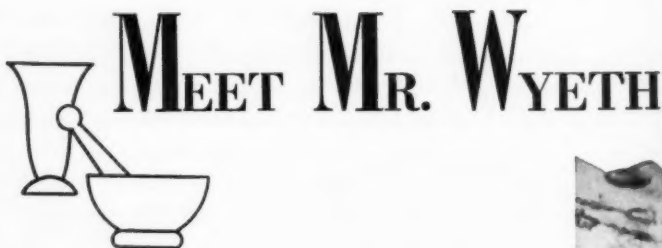
The Men Who Made the Medicine...

Who was Parke? What did Davis do?
How about Lilly, Burroughs and Wellcome, Wyeth,
Eaton, Squibb, Roche, Merck, Sharp and Dohme?
Was there a Mead Johnson or was it Mead *and* Johnson?

Who was Smith and Kline and French?
What did men like Pfizer, Robins, Searle, Winthrop,
Upjohn, Lederle, Bristol and Schering actually do
for the companies which bear their names?
Was there a Dr. Ciba? Who were the Burns Brothers?
What is known about Warner and Chilcott,
Ayerst, Abbott, White, Massengill, McNeil and others
whose names appear in drug company titles?

The editors of RESIDENT PHYSICIAN
went looking for the answers
—and for the first time have brought together
the fascinating, personal stories of the men who worked
to establish today's pharmaceutical companies.
Many never-before-published incidents in the lives
of the founders of present-day drug companies
are contained in these word and picture biographies.
In this issue, RESIDENT PHYSICIAN brings you the first
of this exclusive series of articles about the pioneers in
an industry which has caused a virtual revolution
in medical care and research in our time.

... Pharmaceutical Company Founders



Though John and Frank Wyeth came from a fairly well-to-do family, it cannot be said that they were born with silver medicine spoons in their mouths. For they passed up family newspaper and book store interests to make their own way in the pharmaceutical field, founding the company that today is Wyeth Laboratories, a concern of international scope. The firm dates back to 1860, when the Wyeth brothers opened their retail drug store on Walnut Street in Philadelphia. John was then 26 and Frank 24, sober young men who were determined to make a success of their enterprise. When they weren't rolling pills, filling prescriptions or sweeping out the shop, they experimented with medicinal preparations to make them more palatable.

H



John Wyeth, who was president of John Wyeth & Brother from its foundation in 1860 until his death in 1907.

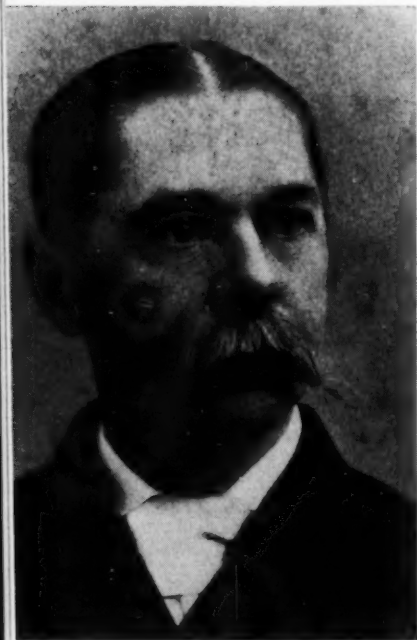
They must have obtained good results, for physicians of their acquaintance were impressed with the clarity, brightness and good flavor of their "sweetened tinctures," or elixirs. John induced a number of doctors to let his firm manufacture in quantity prescriptions which they used frequently.

This led to the publication of a John Wyeth & Brother catalogue of elixirs and official preparations.

John was the promoter and businessman of the combination and the unquestioned "boss" throughout his lifetime. Frank, it appears, was satisfied with this arrangement, for his



The Men Who Made the Medicine



Frank Wyeth, John's brother, who was part owner of the business from 1860 until his death in 1913.

ence to Mr. Wyeth's wishes, the services will be extremely private, not even the place of interment being made public."

Printer

This drive to stay out of the public eye was ironic, for the Wyeths' grandfather and father had made a living as newspapermen. John Wyeth, the grandfather, was an energetic man who lived to be 88, dying in 1858. He was one of eight children of Ebenezer Wyeth Jr. (1727-1799), whose brother Noah had the distinction of having helped dispose of the tea in the famous party in Boston harbor.

Ebenezer and Noah were descended from English settlers who spelled their names variously as Wyth, Withe, Wythe and Wyeth. (Probably the George Wythe whose signature helped bind Virginia to the Declaration of Independence was related to the Wyeths.)

The Wyeth branch of the family settled in Cambridge, Mass. John, the grandfather, served a printer's apprenticeship in Boston, and from

interests lay in the production and technical end of the business.

If there were differences between the brothers, they certainly were not aired outside of the shop. They shrank from personal publicity, seeking privacy with the same determination they applied to their work. When John died in 1907 the obituary in the *Philadelphia Ledger* contained this statement: "In defer-

there moved on to the Caribbean, to Santo Domingo (now the Dominican Republic.) He was foreman of a printing plant there when he was forced to flee, disguised as a sailor, during a native uprising.

In 1792 John Wyeth and another man bought *The Oracle of Dauphin County*, a newspaper in Harrisburg, Pa. In time he also became a book store owner and real estate operator. (Like his grandson John, he must have been an aggressive man who could fix his eye on a goal and reach it.) His son Francis (1806-1893) took over these enterprises.

Thus the family was well established when Francis' sons were born in Harrisburg, John on May 4, 1834, and Frank on July 14, 1836. Though they did not take to the newspaper business, John in later life bought an interest in the *Philadelphia Record*.

They received formal training as druggists at the Philadelphia College of Pharmacy, John graduating in 1854 and Frank attending in 1857, but without getting a diploma.

Retail store

John, according to old accounts, worked for a while for Thomas A. Scott, a railroad man who was to become the fourth president of the Pennsylvania Railroad. It is thought that John was employed as a sur-

vveyor, a stint probably sandwiched in between his graduation from pharmacy college and his start as a druggist. This was as the partner of Henry C. Blair in a retail pharmacy in Philadelphia. Frank also got his start here by clerking in the store.

In 1860 John sold his interest and founded John Wyeth & Brother, setting up shop at 1410 Walnut Street, a location that is part of the site of the present day Bellevue-Stratford Hotel.

This was a time of change and expansion in Philadelphia. It was growing in population and in importance as a commercial center, both factors auguring well for new enterprises. On the other hand, there was the unrest caused by the growing split between North and South. Many of the half million residents of the City of Brotherly Love felt no affection for fellow Americans below Mason and Dixon's line.

When war did come, it had an effect both on the new business and the personal life of Frank Wyeth.

The brothers supplied substantial quantities of medicines to the Union Army. This was not without its problems, for narcotics, quinine and other drugs frequently were stolen in shipment by black marketeers who resold them at high prices to the government. According to his



nieces (who supplied material for this article), Frank himself guarded a shipment when the regular dispatch officer became ill, with the result that he and his wife received threatening notes from the frustrated thieves.

Virginia belle

Frank's wife was the former Henrietta Braxton Horner, a pretty Vir-

Maxwell Wyeth, son of Frank, who assisted his father in the laboratory for a number of years. A disagreement with his cousin, Stuart, caused his retirement from active participation.

ginia belle. We know something of their courtship because, unlike the reticent Wyeths, Henrietta put her experiences down on paper. A beautiful and vivacious young lady, her account of this period of her life remains a valued family possession.

She and her brother were visiting an aunt in Philadelphia when she was introduced in 1858 to Frank Wyeth, who was then clerking in Henry Blair's drugstore. "This acquaintance," according to Henrietta, "ripened into friendship."

During the next few years she made many trips between Philadelphia and Mountain View (Fauquier County), Virginia, where she lived with her family. In 1861 she came to Philadelphia for an operation on her eyelid. While she was recovering and enjoying Frank's company, Fort Sumter was fired upon. Philadelphia, along with other Northern cities, became most inhospitable to Southerners. To demonstrate his loyalty, Alfred Horner, Henrietta's



cousin with whom she was staying, was made to fly the U.S. flag outside his house.

Accepting Frank's proposal of marriage, the romantic Henrietta wanted to get the ceremony performed at her home in Virginia. But at this stage of the war, the bridge over the Potomac was manned against possible invasion from the south, making it next to impossible for anyone to travel to Virginia.

Sees Lincoln

The determined Henrietta tried to get official permission to pass through the lines. She went to see Secretary of State Seward in January, 1862. Refused permission, she took her case directly to President Lincoln.

He, too, refused her request, but treated her with courtesy and understanding. As a result he became in her mind an object of veneration, whereas before she had hated and feared him.

Resigned to a "Yankee wedding," Henrietta wrote her family and received their blessing by mail. She and Frank were married at Holy Trinity Church in Philadelphia on February 20, 1862.

Little is known about John Wyeth's marriage except that his bride was the former Sadie D. Stewart, who gave birth to a son, Stuart,

on October 17, 1862. She was said to be a beautiful but unhappy woman, and though John built her a handsome house in Washington, D. C., she spent most of their married life in Paris. Perhaps it was this disappointment that caused John to pour himself into his work.

The firm prospered. The floors above the Walnut Street store were acquired to provide room for more manufacturing operations. To further expand the business, John Wyeth took samples to Boston to detail doctors on the Wyeth line of drugs.

New plant

When additional capital was brought into the firm by another pharmacist, Edward T. Dobbins, the retail operation was sold to a man named Morgan, and John Wyeth & Brother confined their activities to manufacturing and wholesaling. John owned at least 50 percent of the stock, Frank and Dobbins the rest.

A fire which started in the basement of Morgan's store destroyed the entire building in 1889. The Wyeths relocated at 11th and Washington Avenue in Philadelphia, while Morgan set up shop on Walnut Street.

Now with ample space for manufacturing, the Wyeth firm was ready to explore the development of new



The Men Who Made the Medicine



This 19th century rotary tablet press recently was presented to the Smithsonian Institution for its Gallery of Pharmaceutical History. Shown with the machine are (left to right): John D. Cash, Wyeth vice president in charge of production; George B. Griffenhagen, curator of the Smithsonian's Division of Medical Sciences, and Herbert W. Blades, president of the pharmaceutical firm.

pharmaceutical products. Up until this time they had been best known for their compressed and coated tablets; to produce them, they had devised their own secretly engineered presses and pans. (Most of the equipment not destroyed by the fire was gradually rebuilt and modernized, but one 19th century rotary tablet press was until recently still in operation at Wyeth's Philadel-

phia plant. It was donated, as a museum piece, to the Smithsonian Institution in Washington, D.C., where it is now on display.)

Herman Wipf, a Swiss pharmaceutical engineer, was brought to this country by John Wyeth to superintend the production of new types of pharmaceutical specialties. Under Wipf's direction the first glycerine suppositories made in

America were added to the line; also a large assortment of effervescent salts and gelatin capsules.

As was common in the industry, an aura of secrecy surrounded the manufacturing operations of the Wyeth firm. Employees were not encouraged to learn what went on in the next department, and thus trade secrets were kept from competitors.

Principles

John Wyeth & Brother became one of the most successful and

highly regarded concerns of its type in America. And in the process John and Frank acquired wealth, including patrician homes on and near Rittenhouse Square. But John never pursued profits at the cost of principles. Like his father and grandfather, who had supported the Democratic cause in their Harrisburg newspaper, John was an exponent of free trade, even when it hurt. He was in the forefront of the campaign to abolish the import duty on quinine, and when this came about, the Wyeth firm sustained a

Their Own Lives

In the long ago, when doctors had time to read all their mail in the morning, the Wyeths of Philadelphia carried on a prosperous business without ever getting their pictures in the paper or writing a biography. They felt their lives were their own.

Now that all the Wyeths who had anything to do with the drug business have long since passed on, a biographer would get the impression of several Prince Albert-coated, distinguished looking ghosts conferring among themselves and looking displeased at this unseemly interest in their lives.

Old, yellowed newspaper files that tear and disintegrate unless handled with scrupulous care are still on file at the Free Library of Philadelphia. The obituary notices of the Wyeths can be found there. They have all the earmarks of having been painfully extracted by persistent reporters from reluctant business associates and relatives. What these "obits" did not tell was learned by talking to kindly and cooperative members of the Wyeth family and to a few old-time Wyeth employees who remember the Wyeth founding fathers.



serious loss. John accepted this without complaint.

During the last few decades of his life John came to work in a carriage manned by a coachman and a footman. This was in keeping with the times—around the turn of the century the ownership of a coach house and stable were essential attributes of the successful man. He had at least two coachmen whom his nieces remember as Big John and Little John. One of them, John Malone, was still in Wyeth service in the 1920's, driving a mule team for Stuart (son of John Wyeth) between the factory and the docks. Though trucks delivered most of the freight, John Malone and his mules remained a reminder of bygone days.

John Wyeth was a formidable man at the peak of his success. He was sharp of eye, sported a spiked mustache, and his customary business attire consisted of frock coat, striped trousers, and a flowing tie of either light blue or light yellow. A top hat completed his elegant dress.

Mushrooms

His office was dominated by a large roll-top oak desk. Nearby stood a long table at which his son Stuart worked, learning the business under his father's tutelage.

John lived in a quiet fashion. On weekends he often went to Atlantic City, where he had a house. Occa-

sionally he went to Europe. If he had a hobby it was growing fancy mushrooms and other vegetables at his farm at Westtown, Pa. He died on March 30, 1907, at the age of 73, the same extreme reticence attending his cremation and burial as had attended his life.

Frank Wyeth was somewhat more colorful than his older brother. Though he lived in a style appropriate to his position, he was an unpretentious man who didn't mind getting his hands dirty. One day during his early years in the drug business, his pretty wife sailed into the plant and approached a man who was busily engaged in cleaning up the back room.

"My good man, where can I see Mr. Frank Wyeth?" she asked. She burst into laughter when the man looked up. It was Frank.

Homebody

Frank was a confirmed homebody and family man. (This was in contrast to John's lack of family life—his wife was conspicuous by her absence. It is said she died abroad, of deranged mind.)

Frank went home for lunch every day. In the afternoon he spent several more hours at the plant, leaving a little before closing time for his daily visit to the Union League Club, of which he was a charter member. He was usually home for

dinner at six, and took his family for a carriage ride if the weather was good. On Sundays they attended Trinity Episcopal Church.

Frank's nieces like to recall Thanksgiving dinner at the home on Rittenhouse Square. Not only were the turkey and pies wonderful, but there was a \$5 bill under each child's plate.

After John Wyeth's death in 1907, his son, Stuart, became president, while Frank continued as vice president until his death in 1913. Edward Dobbins had died a year before John, and had sold his interest in the firm long before then.

More leisure

Frank's son Maxwell (1865-1937),

John Malone and his mule team.





The Men Who Made the Medicine

who graduated from the Philadelphia College of Pharmacy in 1888, was employed for a number of years as his father's assistant in the laboratories. He was a minority stockholder. He didn't get along well with his cousin, Stuart, and gave up active connection with the company after his father's death.

Stuart and Maxwell had the advantage of coming into a thriving concern that had been created from nothing by unremitting application on the part of their fathers. The sons enjoyed a great deal more leisure than their fathers, and they both took advantage of it.

Stuart, who never married, spent a great deal of his time in Paris, London and New York. His mother's fondness for Paris had no doubt made an impression on him. While Stuart was away he was able to entrust the business to conscientious employees.

Stuart's education was not in pharmacy. After graduating from Harvard College in 1884, with an arts degree, he studied law at the University of Pennsylvania. Among old-time and retired employees, Stuart is remembered as somewhat of a mystery man. Some think of him as an unapproachable autocrat, while those who had closer contact remember him as an austere but kindly gentleman who would recognize the loyalty of employees with

thoughtfulness and generosity.

One of Stuart's idiosyncrasies is remembered by all: the white cotton gloves that he wore in the laboratory and the tan capeskin gloves he had on in the office. They were supposed to serve as protection against germs and contagion.

Stuart Wyeth died of a heart attack on December 31, 1929, in his apartment at 1830 Rittenhouse Square, at the age of 67. He left the bulk of his estate, including a controlling interest in the firm of John Wyeth & Brother, to Harvard University.

For a few years the company was operated under Harvard ownership. In 1932 it was purchased by American Home Products Corporation, of New York, which continued it for several years under the old family name before combining it with several other ethical subsidiaries under the name of Wyeth Laboratories. From this point on, the Wyeth business acquired the sinews of modern technology.

Excellent research facilities were organized, highly competent personnel employed. The company, which under the old regime had slipped back from its high position in the industry, became again one of the outstanding pharmaceutical concerns in the country.

Through its world-wide affiliate, Wyeth International Limited, the

company now has 23 foreign manufacturing plants and sales organizations in more than 50 countries, including Mexico, Brazil, Canada, France, Italy, Australia and India. Wyeth today has United States manufacturing facilities in Philadelphia, West Chester, and Marietta, Pennsylvania; Chicago; Mason, Michigan, and Meridian, Idaho. It has one of the largest sales organizations of its kind in the country.

The executive offices and head-

quarters for the Wyeth Institute for Medical Research are located in a modern building on a large tract of land in Radnor, Pennsylvania. There, in a glass case in the lobby, can occasionally be seen some of the yellowed documents that hark back to the days of John and Frank Wyeth, who would no doubt rub their eyes in wonder if they could see today the impressive growth of the business they started just before the Civil War.

NEXT MONTH:

**Hervey C. Parke
and George S. Davis — and their
“upstart company from out West . . .”**



RESIDENT RO

This month's panel

Dr. Benson: A graduate of a medical school in The Netherlands, he returned to this country and repeated his last two years at a mid-western medical school. Now an intern at a New York voluntary hospital, he plans to put in his Armed Forces service time before taking a residency in psychiatry.

Dr. Kellem: A graduate of an eastern medical school, he completed a rotating internship at a VA hospital in New York. He is now an assistant resident in pediatrics at a voluntary hospital in the East.

Dr. Garry: A graduate of a medical school in Switzerland, he is now interning at a voluntary hospital in New York. He plans to take a residency in ophthalmology.

Dr. Wilson: A graduate of a midwestern medical school. He took his internship in a southern hospital and is now completing his residency training in medicine in an east coast voluntary hospital.

Resident Roundtable is a transcript of a recorded panel discussion among residents and practicing physicians. The comments, ideas and opinions expressed by panel members do not necessarily represent the views of RESIDENT PHYSICIAN or its editors. Actual names of panel participants are not used. Readers' comments are invited concerning any point at issue in the discussion. Address your remarks to "Resident Roundtable" in care of this journal.

NT ROUNDTABLE

What's wrong with medical education—how can it be improved? These questions come under discussion as the panel takes a close look at the aims and results of medical education today.

MODERATOR: I think we can start our discussion by putting the x-ray on the product of medical education—the doctor. Gentlemen, what is a *good* doctor?

DR. BENSON: My definition of a good practicing physician is one who can utilize his training to improve the general well-being of his patients; not just cure a specific illness and let it go at that.

DR. KELLEEM: I would agree with Dr. Benson. A good physician is one who understands the problems facing a person as a whole. It's important for the physician to treat a patient as

a human being in addition to the treatment of a specific disease. This is a cliché—but still a fact.

DR. GARRY: I agree. The doctor should make an effort to understand his patient. The patient who comes into an office or hospital very often has a great many problems. Of course, frequently the doctor is extremely busy, his time is limited. Sometimes he's even too tired and exhausted to give the proper attention to the nonmedical part of the patient.

MODERATOR: It seems we're agreed as to what a good physician should be—that is, in general terms—though I think we'll explore this further as we go on. Now, does medical education today produce this good physician?

Background

DR. KELLEME: No, I don't think medical training at the present time is conducive to the development of the ideal physician under discussion.

MODERATOR: Why not?

DR. KELLEME: Because the average medical student is too concerned with grades to develop himself as a person. He doesn't broaden his cultural background. Consequently he doesn't have the understanding and empathy necessary to the treatment of a patient as a whole individual.

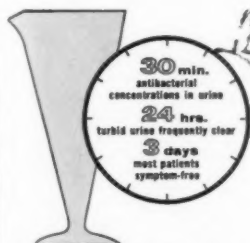
MODERATOR: Does anyone else agree that cultural training or background is important in developing the good physician?

DR. GARRY: I do. But in medical schools today one just does not have the time to do both—study medicine and broaden himself as an individual. Cultural training must start at a very early level. In other words, the man entering medical school must come there with a certain background in order to become the good physician.

DR. BENSON: I object to the use of the word *cultural*. I don't feel it's necessary for the good physician to be a cultured person. But I believe he should have a certain degree of social maturity, and I don't think that's synonymous with culture.

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REFERENCES: 1. Rives, H. F.: *Texas J. M.* 52:224, 1956. 2. Diggs, E. S.; Prevost, E. C., and Valderas, J. G.: *Am. J. Obst.* 71:399, 1956. 3. Macleod, P. F., et al.: *Internat. Rec. Med.* 169:561, 1956.

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DR. GARRY: When I used the word, culture, I didn't mean it in the strict sense of a knowledge of Latin and Greek, but in a larger sense. I think true culture is a combination of education, experience, awareness.

MODERATOR: Your definition comes close to Dr. Benson's term—social maturity. How can the medical student arrive at this social maturity? Can he get it through training?

DR. BENSON: Training is part of the answer. Pre-med training would be more valuable in this respect if the curriculum were broadened so that the student wouldn't be almost completely oriented toward the sciences.

Basic individual

DR. WILSON: Training can never be the whole answer. You have to have a certain basic kind of individual to start with.

(All Roundtable members agree.)

DR. WILSON: This individual has to be a man with a heart who has the desire to help people. Not the kind of man who takes a purely academic interest in medical problems—the pure scientist, you might call him.

DR. GARRY: Getting back to the training aspect, I don't think that four years of college automatically produces a well-rounded, understanding person. I think we must get back to something more basic—education in our grammar and high schools. With higher standards in our basic educational setup, we will produce more people with the potential of making good physicians.

DR. KELLEM: Don't forget the teachers who give us this education. In general, I think that American standards for teachers are pretty poor. So first we must develop teachers who can give students this broad training and outlook.

MODERATOR: I think all of us would agree that primary education is not above improvement. But that's another subject in itself, a very complex one, I might add. For the moment let's limit our discussion to pre-medical training. How can it be improved?

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Material gains

DR. WILSON: A big step would be to make the necessary changes which would alter the student's outlook. From his first year in pre-med on, the student today concentrates on materialistic gains.

MODERATOR: What do you mean by materialistic gains?

DR. WILSON: Just this: The student does not study physics so much to learn physics, but to get a mark which will help to get him into medical school. This could be remedied. I believe that if medical schools earnestly attempted to put less stress on marks and more on total intellectual capacity, intellectual curiosity and background, we would have a start in the right direction.

MODERATOR: Before we get on the subject of grades—and the pursuit of high grades is not peculiar to medical education—tell me, Dr. Wilson, what you mean by background. Doctors' sons should be doctors—is that what you mean?

DR. WILSON: No, not at all. By background I mean the intangible quality of character and mind which can be determined only through a series of interviews. This way the interviewer should be able to decide if the candidate has it in him to become the good physician.

Technical ability

DR. KELLEM: Interviews would be valuable, but I feel that a closer determination of the candidate's intellectual capacity is still needed. A good doctor is one who has a precise knowledge of the technical aspects of his specialized field. He must have a first-rate ability in the sciences. Thus, the ideal student should be a man of feeling and understanding, and a good scientist, too; a man capable of coming to the right diagnosis because of his technical ability.

DR. BENSON: What you say is definitely true. But I would like to get back to the pre-med training itself. In pre-med the basic sciences, like biology, chemistry and physics, should be enough to prepare the student for his further medical studies,



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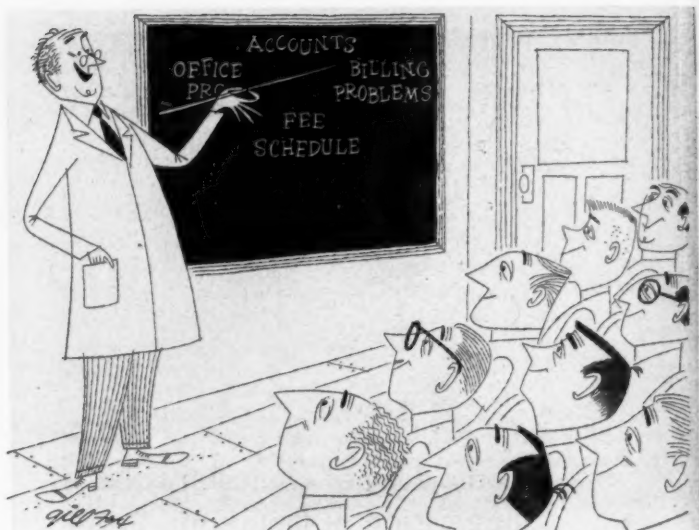
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1. Shook, D. M.: *Am. Pract. & Digest Treat.* 7:917 (June) 1956.

2. Schneeberg, N. G.; Perczek, L.; Nodine, J. H., and Perloff, W. H.: *J.A.M.A.* 161:1062 (July 14) 1956.

SEARLE



which will be much more scientific and specialized. In other words, science training can, for the most part, be given in medical school.

MODERATOR: Are you saying that there is too much emphasis on the medical part of pre-medical education?

DR. BENSON: Absolutely.

DR. KELLEM: I definitely agree with that.

DR. GARRY: I do too. And I would like to add this: Many of the pre-med science courses—physics, chemistry, zoology—function as weed-out or flunk-out courses. I am sure we have all experienced such courses.

MODERATOR: Is the effect of such courses bad?

DR. KELLEM: I think so.

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DR. BENSON: I agree. They restrict the pre-med student because they make him concentrate on the sciences, to the detriment of his liberal arts training. In connection with this, I feel the pre-med should have an opportunity to take work-study courses in which he would spend several months each year working on the outside. Having worked with different social and economic groups, he would have a greater insight into their problems when he's a physician.

Remove tag

DR. WILSON: I think one of the first steps in improving medical education would be the elimination of the classification, pre-med student. In other words, let's stop putting the man who wants to be a doctor into a special group. He can still take his science courses.

DR. GARRY: I think that's feasible. In almost any good university the candidate for a BA has to take a certain number of science courses. Perhaps these can just be added to, to some degree.


DR. KELLEM: In the ideal pre-med training, I think the student should be mainly interested in a liberal arts course for the first three years. Then in his senior year he can take a couple of courses which would give him specific grounding and readiness for basic science training in medical school.

DR. GARRY: But before such a program could be possible, medical schools would have to change their criteria, so that they would not require certain things that are required today.

DR. WILSON: I know that some medical schools have done this. They tell you in their application blanks that they require such and such amount of scientific courses, and they suggest your taking the rest of your credits in liberal arts courses. Many schools will come right out and say that.

Lip service

DR. BENSON: But the way it works out is that these same medical schools will judge the candidate by his marks in the sciences. They don't give a darn about the other marks.



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DR. GARRY: Medical schools give lip service to the theory of a broader pre-med training, that's all.

DR. KELLEEM: It is natural for a medical school to look for good grades in the sciences. These marks are a prime indication of a man's chances of doing well in medical training. A man might do well in other fields—say economics or literature—but that is no indication he would do well in medicine. The medical schools must have some valid criteria. But at the same time, as was said before, the classification of pre-med student should be knocked out. A student who wishes to go to medical school can be in the general program where he will also get the two or three basic science courses needed for medical school. The rest of the scientific part of the program can be knocked out.

DR. BENSON: We talked about social maturity before. Well, by spending four years in college, the student will have more of a chance to mature.

MODERATOR: Yes, and the extra liberal arts courses taken during that time would be valuable. It wouldn't simply be a case of marking time.

Work-study

DR. BENSON: That's why I earlier mentioned work-study courses. They certainly would help a man mature.

MODERATOR: Can you clarify the term for us. Just what is a work-study course?

DR. BENSON: I am referring to a system in which undergraduates spend specific periods actually working for a living. They study for three months, then work for three months, study for three, work again for three.

MODERATOR: Do you mean that the student should work as a medical aide, a kind of apprentice doctor?

DR. BENSON: Not necessarily. He can work at any type job—as a factory hand, office boy, or with a construction gang. The idea is he is learning something about industry and its



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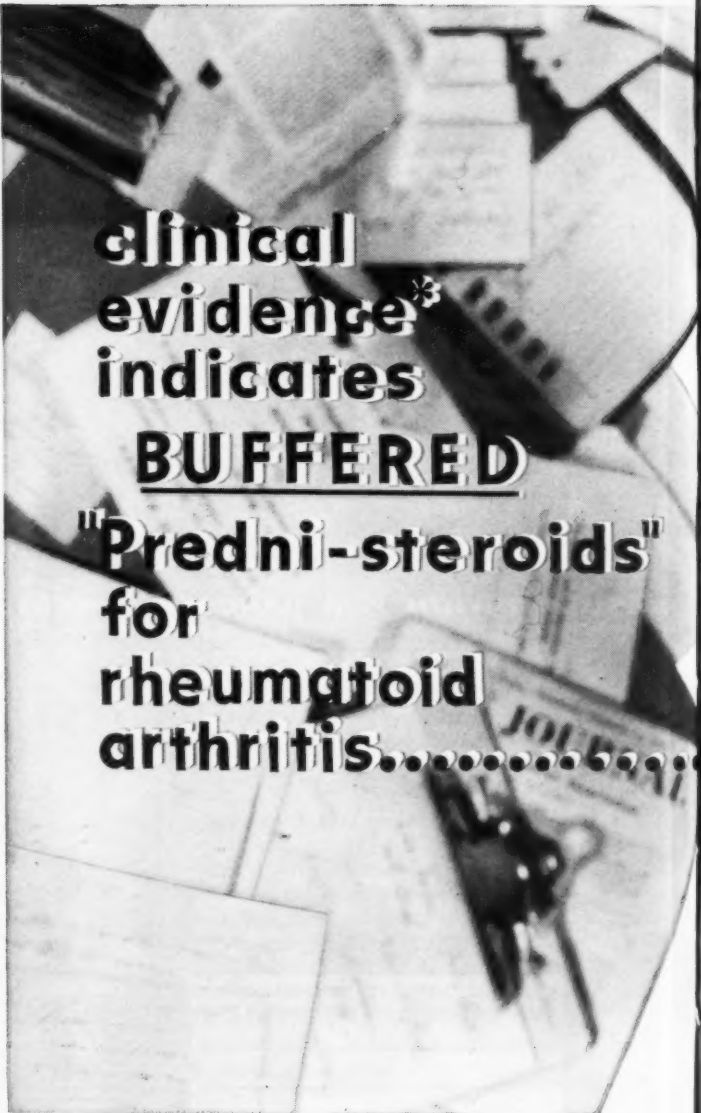
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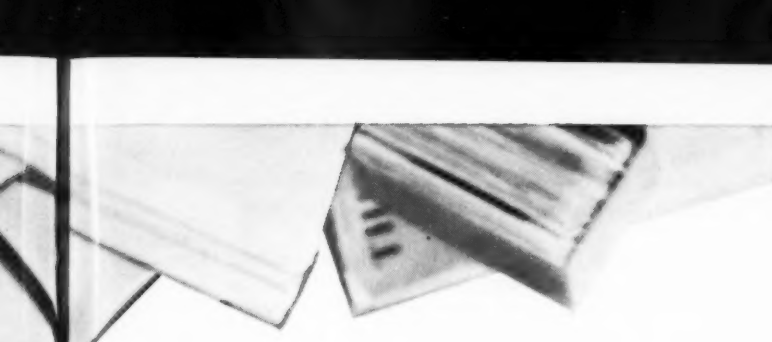


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problems, and he is learning something about people. It's the kind of thing they do at Antioch College in Ohio.

DR. KELLEM: This kind of thing can be overdone. Formal training is very important for a physician. One matures through his education, not in spite of it. That's why I think it is most important for the medical student to have had a good and also thorough liberal arts training in college. Many of the science courses can readily be eliminated from the pre-med curriculum, however.

MODERATOR: Do you agree, Dr. Garry?

DR. GARRY: Yes. But in this liberal arts training, I think there should be none of the so-called survey courses. Reading so many pages of world history a day is a waste of time—you forget it as soon as you learn it. The liberal arts courses should be basic and thoroughgoing, so that the student really learns something.

MODERATOR: You mean the type of course the history, literature or sociology major takes in college, don't you?

Vital subjects

DR. GARRY: Yes. What I think is useless is cramming your head full of dates and other small details in a history course. The course should explain the whys and wherefores of history. When I look back on my education, I regret many things about it. Now, after having traveled and seen a bit of the world, I realize the vital nature of history, sociology and other such subjects.

MODERATOR: In other words, you matured.

DR. GARRY: But I think I would have reached this maturity sooner if I'd had the kind of liberal arts training I have described.

DR. KELLEM: I agree with what has been said about the value of a liberal arts education and its broadening effect. But I also think that the pre-med has to develop the habit of learn-

ing facts, for when he gets to medical school he is required to memorize millions of facts.

Facts

MODERATOR: Now we've passed on to the medical school and the memorization of millions of facts. Is this memorization necessary?

DR. BENSON: Unfortunately, it is.

DR. GARRY: You have to memorize the alphabet before you can appreciate Shakespeare. And you must memorize the tools of science before you can treat disease.

DR. KELLEM: The basic facts must be endowed. There's no way to get around it.

DR. GARRY: I think there's no question but that there is a qualitative difference between what you can teach in the pre-medical course and what you can teach in medical school. Medical school is on a scientific level and science must be grounded on basic information. You cannot appreciate vast concepts without first having the stepladder of facts.

MODERATOR: True. But isn't some of this concentrated memorization an effort to pass exams?

DR. GARRY: Yes, we want to get as good a mark as we can.

Marks

MODERATOR: Back to marks again. In medical school is the competition for grades still keen, the way it was in your pre-med course?

DR. KELLEM: I'd say so.

MODERATOR: Why should that be?

DR. KELLEM: Because grades are still important. A student is judged by his grades.

MODERATOR: Aren't passing grades enough? If a man gets a degree from medical school, he is—at least theoretically—qualified to practice medicine. His patients aren't going to ask him what his grades were.

DR. KELLEEM: It's something the student can't get away from. Even if you eliminated grades entirely, the students themselves and the professors, too, would unconsciously be ranking the class, picking out the better students and the poorer students. I think this is inherent in our society and I think it will be so to the end of our time.

MODERATOR: But is it good? I think we agreed that the competition for grades among pre-med students was detrimental.

DR. GARRY: Ranking can be accomplished without a keen competition for grades. It can be done more informally. The professors, after observing the students over a period of four years, know who are the good students and the poor students. The individual student's level will be reflected in the recommendation written by his professors when he goes on to post-grad training.

DR. KELLEEM: But this is still a system of ranking, no matter what you call it. The students are still out to get better grades.

MODERATOR: To get better grades or become better students?

DR. KELLEEM: It's still the same thing, the way I see it, with competition as the end result. In our society one always competes to get ahead and do well in life.

More relaxed

DR. GARRY: There is always going to be some sort of ranking, but I think it can be de-emphasized.

MODERATOR: How?

DR. GARRY: Well, I'll answer that this way. In this country the degree of competition varies from school to school. For



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instance, I think there is greater competition in the New York schools than in schools elsewhere. Dr. Benson, you attended medical school in Pittsburgh—how was it there?

DR. BENSON: They didn't put so much emphasis on grades and didn't keep testing you to keep you on the ball. I also think the general background of the students had something to do with it.

MODERATOR: How did that affect the amount of competition?

DR. BENSON: Many of the students came from rural communities and were not of a highly competitive nature, at least not as competitive as kids from a place like New York. Well, these students were satisfied they were learning medicine, and that was enough for them. Their goal was simply to be competent doctors.

MODERATOR: How about your school, Dr. Kellem?

DR. KELLEMM: Completely different. I went to a New York school and grades were important to us.

DR. BENSON: In Holland, where I also attended medical school, we Americans stood out like sore thumbs because we did so much worrying about marks. The European students told us that. They said we were not going to learn how to be doctors simply by sitting in our rooms and burning the midnight oil. They encouraged us to join student organizations and mix with other kinds of students—law students, accounting majors, liberal arts students, and so forth. This way you get a better rounded educational experience. You don't just see the medical picture.

DR. GARRY: Good point. What you say about Holland also holds true for my experience in Switzerland, where I had my medical training. We had many nationalities there—Swiss, Greek, Iranian, American—and the Americans were the compulsive ones. Though the Swiss were much more relaxed, I have met many Swiss physicians who at the end of their training were good doctors.



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1. Birnberg, C.H., and Abitbol, M.M.: *Obst. & Gynec.* 10:366, 1957.

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Inferior?

MODERATOR: Did you perhaps have the feeling that your education in Europe might have been inferior and therefore you wanted to do as well in your studies as you possibly could?


DR. GARRY: I'll admit that was part of my thinking even though I attended a fully accredited school; after all, my goal was to practice medicine here in the U. S. But frankly, even if I had thought their education superior to ours, I would have acted the same way.

DR. BENSON: Exactly. We worried about marks because that's the way we were constituted.

MODERATOR: We'll close at this point. At a future time we'll discuss another large area of medical education—the clinical years of learning. Thank you, gentlemen, for your cooperation.



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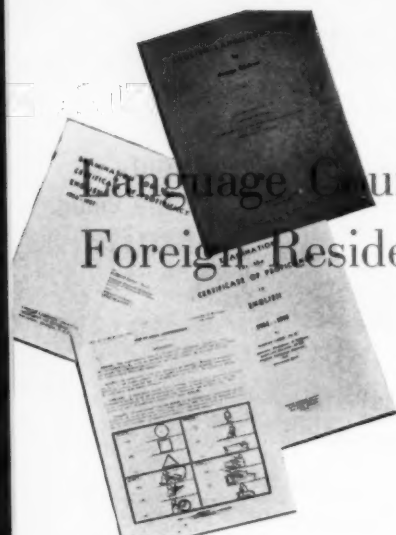
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Language Courses for Foreign Residents and Interns

William R. Slager, Ph.D.
Carter M. Ballinger, M.D.

From the Department of English
and Division of Anesthesiology
University of Utah

(The first part of this article appeared in RP last month. ED.)

Much of the instruction of residents and interns is accomplished informally through conversations. Impromptu discussions in the cafeteria, on the wards, in the recreation room—as well as conferences and lectures on a more formal basis—are the source material of invaluable clinical opinion and understanding. Many a major problem concerning patient management has been thrashed out in unscheduled bull sessions between house staff members and attending physicians.

And in all these various methods

of adding to the individual doctor's knowledge there is one vital tool without which there is no possibility of communicating information from one to another: language is the key, more specifically, the English language as it is spoken in the United States.

Immediate

Here is the essence of a situation which is as tragic as it is immediate. Although a foreign resident and intern must have an almost perfect aural comprehension of spoken-English before he can hope to benefit from his graduate training in a U. S. hospital program, the great majority of such physicians

The visiting foreign house doctor and his American hospital hope to benefit from his internship and residency. To make this possible, the doctor must master spoken English. Here are a few special courses and textbooks which offer foreign physicians and their administrators an important opportunity.

are at best weak, at worst hopelessly inadequate in their ability to understand or speak English.

However, it is the foreign physician unable to comprehend directions, however carefully and patiently given, who is robbing himself and his hospital of what was designed to be a profitable experience of education and service.

Such a doctor becomes easily discouraged, even morose. He interprets the impatience of his American colleagues as distrust or dislike. Occasionally, he quits and heads for home, perhaps with little more than a mental picture of New York skyscrapers and Niagara Falls, plus a number of unpleasant memories.

Obligation

In the first part of this paper (RP—February 1958) we pointed out that because of our world leadership in medicine today, we are expected to share our knowledge and

techniques and to contribute to improved world health.

It is our challenge and our opportunity as a nation and as a profession that we do the best job possible to fulfill these just expectations.

Many foreign countries are spending a great deal to send their doctors here. And many U.S. governmental and philanthropic organizations are sponsoring a large number of foreign physicians in their education in U.S. institutions.

Thus while elevating our own standards of educational and medical care, we also must live up to our obligations to other nations and those organizations which enable doctors to come here for study.

The single most important barrier to the accomplishment of those aims is one of language. There are instances of poor medical training among doctors who come to the U. S. But even if the doctor is

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*Reg. U. S. Pat. Off.



superbly trained prior to his visit to the U. S., his chances of learning more or imparting what he knows in terms of patient care in the United States are, for all practical purposes, nil.

How, then, do we find an answer to this dilemma? The first part of a solution was proposed in our article last month. We discussed the evaluation of the foreign physician before he comes to the U. S. In this section, we will point out some of the training opportunities in English available here and abroad which approach scientifically the language needs of the individual student—English teaching techniques based on a careful comparison of the *sound* system and *structural* system of the native language and the target language (English).

Programs

In these intensive programs, the special concerns of, for example, Thai-English or Persian-English or Spanish-English, can be systematically defined and taught. A few months of careful and intensive English training here are worth years of haphazard, trial-and-error effort abroad—or worse, in American hospital situations.

Finally, this paper makes a brief survey of texts, recordings and other aids to learning English for foreign physicians who need help but who do not have access to one of the intensive courses. The survey is necessarily brief; for, while hundreds of books are available with which the student might achieve indifferent success, there are only a handful of scientifically sound

About the Authors

AFTER RECEIVING his M.D. degree in 1945 at the University of Iowa, Dr. Ballinger took a one-year rotating internship at Fresno County General Hospital in Fresno, California, served two years in the Army Medical Corps (assigned to a VA hospital), and then spent two years in surgery at Crile VA Hospital in Cleveland, Ohio. Then followed a course in anesthesiology at the Graduate School of the University of Pennsylvania and a two-year residency in anesthesiology at Presbyterian Medical Center. He remained there until 1954 when he accepted his present post of Assistant Professor and Director, Division of Anesthesiology, University of Utah, College of Medicine.



DR. BALLINGER

Resident Physician

studies which would be of genuine help. The records available are even fewer, although the lack is being remedied rapidly.

Intensive courses

Since students will need to acquire proficiency in spoken English as rapidly as possible, this discussion will be limited mostly to intensive courses. By far the best opportunities are offered in those universities which have a full-time program in English as a foreign language.

UNIVERSITY OF MICHIGAN, ENGLISH LANGUAGE INSTITUTE. *Robert Lado, Director.* Intensive eight-week courses are offered throughout the year. The student has four hours a day of classroom work, and one or more hours in a fully-equipped laboratory listen-

ing to records and tapes. In addition, he eats lunch and dinner at a table with a teacher who requires that he speak only English, and who helps him practice the patterns that he is learning in class. Emphasis is entirely on control (both aural and oral) of the spoken language. Students are accepted at all levels of proficiency and sectioned accordingly. The Institute has had a great deal of experience with the Kellogg Foundation doctors and dentists grantees from Latin America. Experience has proved that a student

6. The best single source of information on courses is the Institute of International Education, which issues a pamphlet entitled "English Language and Orientation Programs for Foreign Students Offered by Colleges and Universities in the United States of America." New York, 1955.



DR. SLAGER

THE TEACHING of English to foreigners is Dr. Slager's major concern. After he received the Ph.D. in English from the University of Utah in 1951, he taught there as an instructor for one year. He was awarded a Fulbright Scholarship to Egypt where he lectured at the Faculty of Arts, Cairo University, and at the Institute of Education, Heliopolis University. He is Assistant Professor of English at the University of Utah, in charge of English and speech work for the foreign student; and he is also a member of the summer staff of

the English Language Institute, University of Michigan. He has published in *Language Learning* on problems related to teaching English to foreigners.



Dr. Robert Lado, head of the U. of M. English Language Institute is shown here with Hungarian refugees using tape recorder for pronunciation practice.

with some background in English in his own country can acquire enough proficiency within the eight-week period of the intensive course to enable him to carry on graduate work in medicine. Since Michigan receives all the Kellogg doctors, it would be especially attractive to those wishing to be with others interested in medicine. (Tuition and fees \$195.)

GEORGETOWN UNIVERSITY, INSTITUTE OF LANGUAGE AND LINGUISTICS. *Leon E. Dostert, Director.* Georgetown offers an intensive course from June 20 to September 9 only. During the week, 15 hours of classwork and 20 hours of laboratory drills are given. All materials and classroom techniques are solidly grounded on the latest research in linguistics. Those who are able to attend

this one session can expect to make rapid progress.⁷

COLUMBIA UNIVERSITY, AMERICAN LANGUAGE CENTER. *William Cullen Bryant, Director.* Eight-week intensive courses are offered throughout the academic year. The applicant must have had "some formal training" in English to be accepted. There is considerable emphasis on orientation, American life and customs, as well as on language. A special six-week course is offered in the summer, July 9 to August 20. (Tuition and fees \$200.)

NEW YORK UNIVERSITY. *Grant*

7. See Leon Dostert, "The Georgetown Institute Language Program," in the April 23 PMLA. For a report on another well-known language program, see William G. Moulton, "The Cornell Language Program," in the October 1952 PMLA.

Taylor, Director. Full-time pre-university courses in English are offered each semester, September to February and February to June. Some time is spent on orientation, field trips and social activities. In all, the student will devote about 300 hours to English (laboratory work included).

AMERICAN UNIVERSITY, AMERICAN LANGUAGE CENTER. *A. L. Davis, Director.* An intensive English program is offered continuously throughout the year. The sessions last for six weeks, and devote 25 hours to English per week. The Center has a solid reputation, and is particularly known for its excellent materials in pronunciation. The Department of State utilizes the Cen-

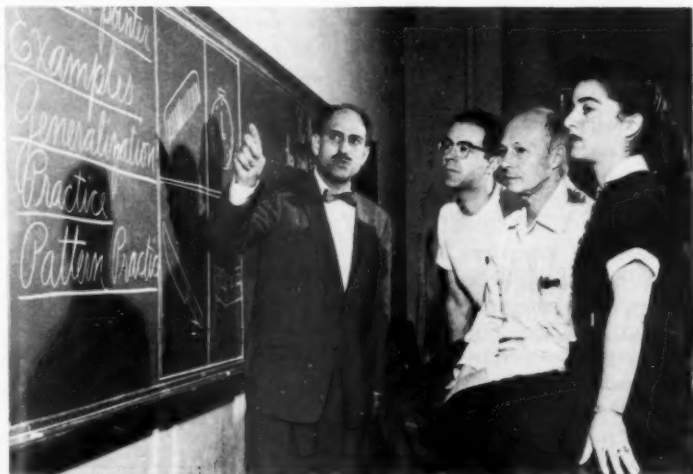
ter extensively for refresher instruction for its grantees. There is a modern, booth-equipped laboratory with dual track tape recorder.

Special courses

Often special summer courses are offered by American universities (for example, the University of California at Berkeley), but the emphasis in these courses is on orientation rather than on language. And the language classes do not offer systematic drill in grammar and pronunciation.

In addition, almost all American universities offer some special courses in English as a foreign language throughout the year, courses which would be of assistance to a

American teachers going abroad to teach English learn classroom techniques.



foreign physician already embarked in hospital training who still needs extra work in oral and written composition. But the student whose English is very weak should abandon hospital training and attend one of the intensive courses; he must master spoken English if he and his hospital are to benefit from his American graduate medical training.

Abroad

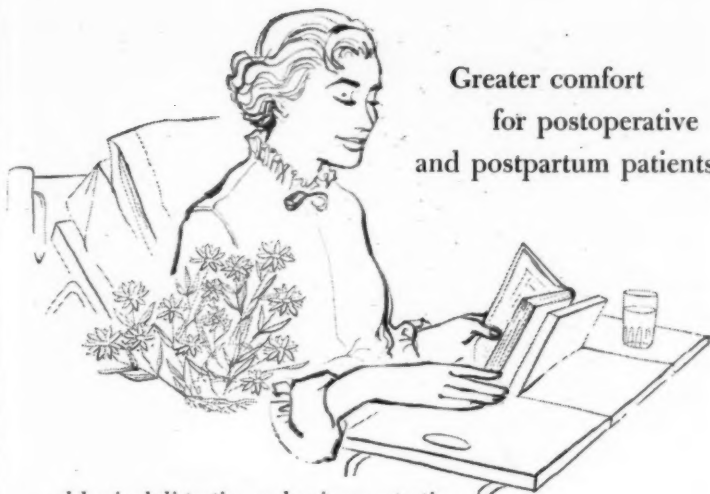
Until recently, opportunities for training in English (with emphasis on spoken English) have been comparatively rare; however, good programs are constantly being organized. In general, students applying from Central and South America are more fortunate: in many of their major cities they will find binational centers (private, autonomous organizations governed jointly by American residents and nationals of the host country) whose chief activity is the teaching of American English. In 1953, there were as many as 60,000 students attending classes in these centers. Binational centers can also be found in Turkey, Iran, Burma and Thailand. The methods and material used in these courses are carefully supervised and are generally linguistically informed.

There are, however, no centers of this kind in Europe. Since many of the European countries have long been teaching English in primary and secondary schools, this lack is not so serious. Denmark and Holland are notable examples: large

Screen and teach

The idea for the present article was born after Dr. Ballinger referred an anesthesiology resident to Dr. Slager for English training. Dr. Ballinger became interested in the kind of testing and teaching that the resident received. After further association and discussion, both he and Dr. Slager became convinced that physicians involved in training programs would appreciate a nontechnical survey of tests and materials recently developed by linguists for screening applicants from abroad and for providing remedial teaching after their arrival in the U. S. The authors feel that both the foreign doctor and the hospital or university in which he trains would benefit from stricter screening: the doctor because he has faced his language problem realistically and has not tried to begin his medical training while seriously handicapped by his English; the hospital because it can concentrate on its proper business of medical care and training without the added problems of misunderstood lectures and directions.

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Americans who plan to teach English abroad and foreign nationals who will teach English in their own countries come to the English Language Institute for instruction in theory and method. Instructor is Everett Kleinjans.

numbers of people in these countries speak English fluently, especially in the cities.

In southern Europe, however, the opportunities for learning spoken English are still very limited. Some programs are organized through the cultural attachés of American embassies and consulates. In all cases, it would be well to inquire at the cul-

tural attachés office first. If such a program does not exist at the embassy, the attaché will know where to find classes or tutors.⁸ However, few of the programs offered will be systematic or intensive.

Texts and records

Unfortunately there are few good texts available for the student who wishes to teach himself. Many texts are presently being published, but most of them are almost worthless. As Lado has pointed out,⁹ there will always be enterprising teachers who are anxious to write books whether they have the proper qualifications

8. See, for example, J. Manuel Espinosa, "Program of English-Teaching Activities Overseas—1956," International Exchange Service, Department of State.

9. Lado, Robert, *Materials and Tests in English as a Foreign Language: A Survey*, *Language Learning* 5:52-3, 1953-4.

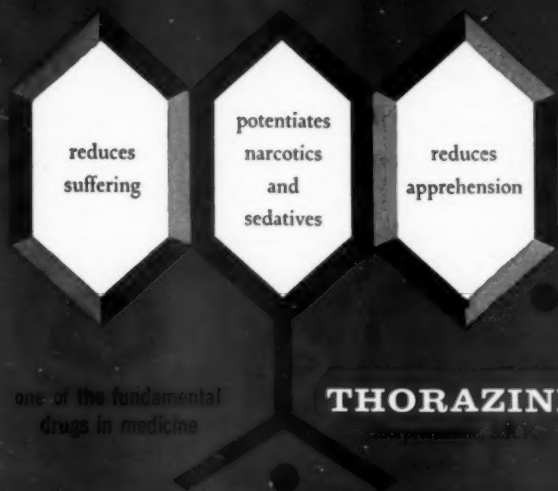
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More Courses, Anyone?

Anyone having information on other short courses in spoken-English, similar to those listed by the authors, please contact this journal. We'll be happy to pass the facts along to our readers. *Ed.*

or not. And, remarkably enough, they will always find publishers. Since the authors usually have little linguistic training, their texts are unsystematic and sometimes even misleading. Good materials should be based on:

- A systematic comparison of the native language and the target language in sounds and structure.

- An exact formulation of the specific problems the student will meet in passing from one language to the other.

- A carefully graded set of exercises dealing with the special problems in pronunciation and grammar that will be met by the student.

- A minimum emphasis on vocabulary, which is the least important item in acquiring control of a new language and should be concentrated on last. Books emphasizing vocabulary acquisition approach the subject backwards and retard the progress of the student.

- An aural-oral approach, which has as its goal a control of the spoken language.¹⁰

The English Language Institute at the University of Michigan has a set of four volumes available for students just beginning the language. The grammar book (*Patterns of English Sentences*) and the pronunciation book (*English Pronunciation*) are the most important. However, since the aural-oral approach is emphasized, the books must necessarily be used with teachers who have a near-native command of English. The Institute hopes eventually to provide records to supplement the texts. Note that these texts are specifically written for students with Spanish as a native language, and must be adapted for other language backgrounds. Note also the four volumes available for Chinese students: *An Intensive Course in English for Chinese Students* by Charles C. Fries and Yao Shen. Instructions for teachers are included in the text.

Spanish-speaking students at elementary and high-school level might well investigate the set of texts prepared under the direction of Fries in Puerto Rico: *Fries American English Series: For the Study of English as a Second Language*. D. C. Heath and Co., 5 vols. These materials were written by Pauline Rojas and the staff of the English section, Department of Education, Puerto Rico.

Again, the oral approach requires that the student hear English first,

10. Cf. Fries, *op.cit.*

there is a specific

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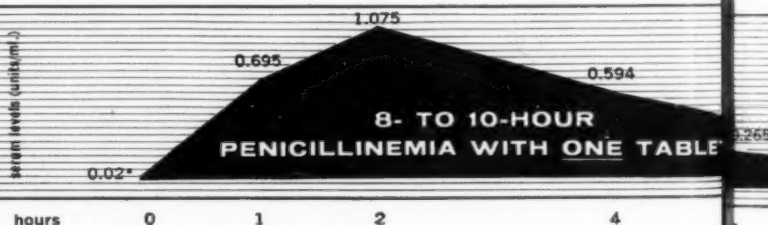
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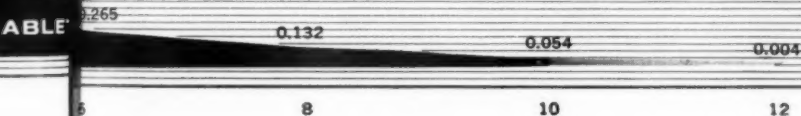
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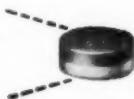
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Co-author Slager conducts an English pronunciation class for Brazilian MDs, dentists and nurses.



then read the text. Audrey Wright's *Practice Your English* (American Book Co.) is also written for Spanish-speaking students.

Language backgrounds

The following texts have been published or sponsored by the American Council of Learned Societies and have all been scientifically adapted for certain language backgrounds. For further information address the ACLS at 1219 16th St., N.W., Washington 6, D. C.

- *Bahasa Inggeris* (English for Indonesians) by Gerald E. Williams and assistants.

- *El Ingles Hablado para los que hablan Espanol* by Frederick B. Agard and associates. (Records are available.)

- *Konusulan Ingilizce* (English for Turks) by Robert B. Lees and assistants.

- *Yong O Hok Pon* (English for Koreans) by Fred Lukoff and assistants.

- *Hehomiloumene Anglike* (English for Greeks) by F. W. House-

holder, Jr. and assistants.

- *Kurs Govornog Engleskog Jezika* (English for Yugoslavs) by Charles E. Bidwell, Sheldon Wise, and assistants.

- *Tieng Anh Cho Nguoi Viet* (English for speakers of Vietnamese) by William W. Gage and others.

- *Englisi Baraye Iraniyan* (English for Iranians) by Herbert H. Paper, Mohammed Ali Jazavery, and assistants.

Records

Since all linguistically informed materials emphasize the aural-oral approach, the student should have a teacher who has native or near-native control of the language. In the absence of a teacher, he should make every effort to find records to supplement his reading. Several good sets are available:¹¹

The student can obtain three long-

11. For other suggestions in using audio-visual aids, see "Audio-Visual Materials in Foreign Language Teaching," Department of Foreign Languages and Literatures, New York University, 1949.



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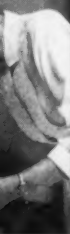


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1. Johnson, J. F.: Proc. Soc. Exper. Biol. & Med. 94:92 (Jan.) 1957. 2. Idem: Paper presented at Symposium on Blood, Wayne State Univ., Detroit, Mich., Jan. 18, 1957. 3. Owren, P. A.: Northwest Med. 56:31 (Jan.) 1957. 4. Published and unpublished case reports.

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playing records (18 lessons) to supplement *The Beginner's Book for English as a Second Language*. These unbreakable records, which use native American-English speakers and allow time for repetition of the student, can be purchased for \$10.00 from Educational Services, 1730 Eye Street, N.W., Washington 6, D. C.

A set of four records can be purchased with the *Pronunciation Course in English for Foreign Students* by Kenneth Croft. Washington Publications, 3915 Military Road, N.W., Washington 15, D. C. The text itself uses a kind of musical notation for intonation and stress.

Every book in the ACLS series mentioned above (except Korean) is accompanied by a set of records.

Two long-playing records are now in preparation for use with Clifford Prator's *Manual of American English Pronunciation*. Rinehart and Co. The price will be 50 cents.

Medical educators need to know more about the language problems faced by foreign physicians. When foreign physicians cannot under-

stand oral directions, they make mistakes in patient care; as a consequence, their responsibilities are reduced and they are shunned by patients, house staff and attending staff. When they cannot understand lectures, they make practically no educational progress; and they have less opportunity than ever to make up for the poor medical background that they begin with. But the foreign physicians are often not wholly to blame: they do not realize the seriousness of their language handicap, and even when they do, they are unaware of the practical steps they might take to improve.

If medical educators use the linguistic information given in this paper they can be assured that their experience with foreign physicians will involve less anguish and more accomplishment. They will be able to:

- Detect language problems of applicants before accepting them.
- Advise applicants who are weak in English about where to go for English training before beginning their work in medicine.



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1. Pulaski, E. J., and Isokane, R. K.: Surg., Gynec. & Obst. 104:310, March 1957.

2. Petersdorf, R. G., Curtin, J. A., and Bennett, I. L.: Arch. Int. Med. 100:927, December 1957.

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● Send present foreign house officers who have trouble learning or are making slow progress to regional and national specialists for testing and counseling.

● Arrange for foreign house officers with mild language handicaps to attend special English classes for foreign students on their local university campus.

● Secure linguistically sound texts and records as aids to learning in cases where no classes are available.

For information

Addresses for information:

U. S. Department of Health, Education and Welfare, Washington, 25, D. C. (Division of International Edu-

cation, Educational Materials Laboratory)

Institute of International Education, 1 East 67th Street, New York 21, New York.

National Association of Foreign Student Advisers, New York University, New York 3, New York.

American Council on Education, 1785 Massachusetts Avenue, N. W., Washington 6, D. C.

English Language Institute, 1522 Rackham Building, Ann Arbor, Michigan.

American Council of Learned Societies, 1219 16th St., N. W., Washington 6, D. C.

Educational Exchange Service, Department of State, Washington 25, D. C.



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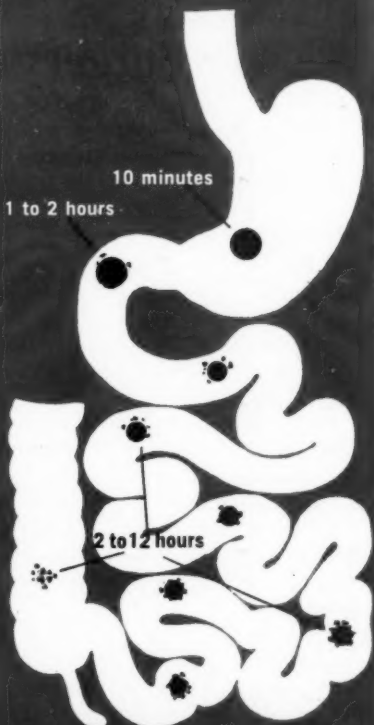
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Questions involving patients' consent, charges of malpractice, charges of breach of contract — these are some of the serious legal problems that can confront the plastic surgeon.



Plastic Surgery and the Law

George A. Friedman, M.D., LL.M.

Although much of plastic surgery is cosmetic rather than therapeutic, the legal problems that occur in this field are basically no different from those arising in connection with other types of surgery.

First of these is the matter of consent. The following case¹ illustrates the problem:

Plaintiff had a stiff finger resulting from an injury. She consulted the defendant, and on being advised that an operation was necessary, consented.

After the anesthetic was administered, however, it was discovered upon opening the hand that the tendons of the finger were adhered together and that to separate them it was necessary to sheath them with added fascia. Therefore, while plaintiff was still unconscious, it

was decided to obtain the necessary fascia from her thigh. In an action for assault and battery, plaintiff contended the operation on her thigh was unauthorized and resulted in a muscle hernia, causing her pain and disability.

On appeal the court held the governing rule to be: "Where a patient is in possession of his faculties and in such physical health as to be able to consult about his condition, and no emergency exists making it impracticable to confer with him, his consent is a prerequisite to a surgical operation by his physician; and a surgeon who performs an operation without his patient's consent, express or implied, commits an assault for which he is liable in damages."

In this case, the operation on plaintiff's finger was not a major

one, and the disclosure, when the finger and palm were opened, presented no emergency authorizing an operation on her thigh. As the court so aptly remarked, "The question here is not whether good surgery justified the operation upon the thigh to obtain the fascia lata. An authorized operation may be well performed and in line with good surgery and still afford no excuse for such a trespass to the person." (The case was remanded for a new trial, however, because the jury's verdict for \$10,000 was found to be excessive.)

Consent presumed

This problem of consent being given for a different operation was also involved in an Alabama case.² Plaintiff had been receiving x-ray treatments for eczema on his feet and an ulcerated condition developed on his left ankle, apparently caused by an x-ray burn.

To cure this condition, defendant performed an operation consisting of cutting skin from the thigh and grafting it upon the ulcerated part. Plaintiff claimed defendant cut out a portion of the Achilles tendon, making it painful and difficult for him to use that foot.

In rejecting plaintiff's contention that the operation performed was different from that to which he consented, the court stated that if a patient voluntarily submits to an operation—that is, after he knows it is about to be performed—and

makes no objection, his consent will be presumed unless he is the victim of false representations.

Incompetent

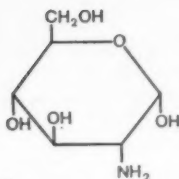
Where an operation is to be performed on a person who is legally incompetent to give consent, such as a child, then the consent of the parent or guardian is necessary.

Thus in a District of Columbia case,³ where a plastic surgeon took skin grafts from a 15-year-old boy for the benefit of the boy's cousin, who had been severely burned, it was held that the surgeon should first have obtained the consent of the boy's parents.

The appellate court rejected the trial court's theory that if the boy appreciated the nature and consequences of the operation, and actually or by his conduct impliedly consented, then the surgeon would not be liable for assault and battery. The appellate court said that the basic consideration, in determining whether a surgeon may operate on a child without the parents' consent, is whether the proposed operation is for the benefit of the child and is to be done with a purpose of saving his life or limb.

Since this was not the case here, the parents' consent was necessary. The court did indicate, however, that consent by ratification might be implied from the fact that the boy's mother, after learning of the operation, made no objection to it or to subsequent operations, and, indeed,

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agent



In the search for the ideal antibiotic-enhancement agent, Pfizer had three requirements to fill: (1) the adjuvant had to produce significantly higher antibiotic blood levels, (2) it had to achieve these higher blood levels consistently from patient to patient, (3) the adjuvant itself had to be perfectly safe to use.

Enhancement studies involving 84 adjuvants (including sorbitol, citric acid, sodium hexametaphosphate, and other organic acids and chelating agents, as well as phosphate complex and other analogs), and 30,000 blood level determinations revealed glucosamine as the enhancement agent of choice. Not only did glucosamine considerably increase antibiotic blood levels, but it produced these higher blood levels more consistently in crossover tests. And, importantly, glucosamine has no adverse effect in the human body. Glucosamine is a normal physiologic metabolite that is found widely in the human body. Glucosamine does not irritate the gastrointestinal tract; it is sodium free and releases only four calories of energy per gram. Further, there is evidence that glucosamine may influence favorably the bacterial flora of the intestine.

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now potentiated with glucosamine,
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gloried in the ensuing newspaper publicity which resulted in public contributions for her son's education.

Malpractice

In malpractice actions, as contrasted with the cases discussed above, the question is whether the operation was properly performed, not whether it was authorized, and proof of negligence with resultant injury is prerequisite to recovery.

What constitutes negligence? In an early California case,⁴ it was held the evidence justified a finding of negligence where the defendants, a plastic surgeon and a beauty parlor proprietress engaged in business together, performed an operation on the plaintiff's face, leaving it disfigured.

On the other hand, in a Wyoming case (*Smith v. Beard*⁵), where plaintiff was severely injured in an explosion in the plant where she worked and underwent a skin-grafting operation performed by defendant physician, recovery was denied on the grounds that plaintiff's charges of negligence were refuted as a matter of law by showing that a body of expert physicians approved of the method selected.

With respect to plaintiff's claim that there had been an unreasonable delay in grafting, the court pointed out that the testimony on both sides agreed that before skin-grafting could be done, the wounds had to be free from infection; that, in effect, it was for the individual doctor to

determine whether the wounds were in fact free from infection. Regarding plaintiff's claim that there had been insufficient grafting, the court noted the unanimous opinion of the expert witnesses for both sides that nature should ordinarily be allowed to take its course.

The court concluded, therefore, on the basis of this testimony, that both the time and the extent of skin-grafting were matters of judgment for the attending physician. And "as long as there is room for an honest difference of opinion among competent physicians, a physician who uses his own best judgment cannot be convicted of negligence, even though it may afterward develop that he was mistaken."

Where plastic surgery was performed on a 22-year-old man to remove dark circles from under his eyes, followed by additional surgery to remedy a dropping of the lower lid caused by the first operation, the defendant was found to be negligent in that he knew, or should have known, that the operation was unnecessary and likely to result in injury, but advised and performed it nevertheless.⁶

Speaks for itself

While the plaintiff in a malpractice action always has the burden of proving negligence, there are cases where under the doctrine of *res ipsa loquitur* (the thing speaks for itself) a presumption or inference of negligence on the part of the

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defendant may be predicated on the existence of a single factor or event.

A California case (*Soest v. Balsinger*⁷) involved an operation on the plaintiff's nose. An infection occurred, and there was evidence of a dirty field of operation and the use of unsterile instruments. It was held that the danger of infection from an unsterile instrument, or a dirty field of operation, is a matter of such common knowledge that a jury is authorized to draw the reasonable inference that an infection was caused by negligence where these conditions were present.

Judge results

In a case against a physician's administratrix⁸ the California court again applied the *res ipsa loquitur* doctrine. It held that the plaintiff, who had undergone plastic surgery on his nose and chin, did not have to produce direct evidence as to the technique used by the doctor or the particular manner in which the surgery was performed, because the circumstances were such that the results would speak for themselves.

"If in the opinion of experts the undesired result which they observed would have been avoided if the

even if your patient is a

gandy dancer[†]

[†]railroad man's term for track section hand



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proper degree of skill, judgment and care had been used, this alone [is] a sufficient reason for an opinion that they were not used." (Judgment for the plaintiff was reversed, however, because the trial court erred in refusing to instruct the jury that where a party to an action has died and therefore is not available to testify in his own behalf, there is a presumption of law that he exercised reasonable care and was not guilty of negligence.)

A similar case involved a 50-year-old fashion designer who had plastic surgery performed on her breasts and abdomen. As a result there was disfigurement and unsightly scarring, giving her "a grotesque appearance;" lumps developed in her breast.

The court held that the plaintiff's appearance spoke for itself. "Only a lack of due care or skill could bring about the repulsive condition shown by the photographs."*

The court then proceeded to a consideration of the amount of the verdict and concluded, "taking into consideration the disfigurement, the pain, the humiliation, and the malignancy, we cannot say that the award of \$115,000, large as it is, is so far out of line as to show passion and prejudice on the part of the jury."¹²

Proximate cause

A necessary element in all malpractice cases is proof that the plaintiff's injuries were proximately

caused by the defendant's negligence. The law, however, does not impose an impossible standard, it being sufficient for the plaintiff to establish by a fair preponderance of the evidence that defendant's negligence was the proximate cause of the injury.

This principle was demonstrated in a case where plastic surgery had been performed on plaintiff's nose causing the nostrils to shrink together. Expert testimony on behalf of the plaintiff attributed the shrinkage to a cutting of the lining membrane, but this was countered by expert testimony on behalf of the defendant attributing the shrinkage to "an inherent condition of scar tissue formation." Judgment for the plaintiff was upheld. The court stated: "It is not . . . required in the trial of malpractice cases that the negligence of the defendant as the proximate cause of the injury be established with such absolute certainty that any other conclusion is excluded. Substantial evidence which reasonably supports the judgment is sufficient."¹³

** On the subject of photographs, it might be noted that for the purpose of communicating certain data observed by the witness their admissibility as evidence is sanctioned beyond question, provided, of course, they are relevant and material, and do not arouse the passions and prejudices of the jury." Specifically, photographs may be admitted to prove the physical condition of a person at a particular time."*

The new purified injectable penicillinase, NEUTRAPEN, aborts penicillin reactions. Current therapy—antihistamines, CTH or steroids—treats effects. NEUTRAPEN counteracts the cause by neutralizing the penicillin itself, thereby offering a new concept of treatment and the promise of safer penicillin therapy.

penicillin levels at zero 4 to 7 days^{1,2} The action of NEUTRAPEN is specific, rapid and long-lasting. Its effect in inactivating circulating penicillin has been shown to occur within an hour after injection, and to continue for four to seven days.^{1,2}

highly effective³ NEUTRAPEN effected prompt and complete clearing of reactions in 45 of 52 cases reported by Zimmerman.³ When given in the first month, one injection of NEUTRAPEN usually cleared the reaction in 12 to 96 hours. Becker^{4,5} noted complete clearing of urticaria and angioedema within 24 to 72 hours in 42 of his 46 patients. The absence of relapses was termed "a major clinical achievement..."⁴ Minno and Davis⁶ reported complete clearing in all 12 cases studied and were "...impressed with the prompt relief of itching which was noted in nearly every case..."

well tolerated¹⁻⁷ On the basis of pharmacologic studies, Chen and his co-workers² found NEUTRAPEN to be "...virtually nontoxic, even at dose levels several hundred times the minimum effective dose." Clinically, NEUTRAPEN has been shown to be well tolerated when used intramuscularly.⁶

may be lifesaving In the immediate type of anaphylactic reactions, NEUTRAPEN would not have time to be effective, but it may be lifesaving in those which occur in an hour or several hours after injection of penicillin.^{4,5} In such cases, Becker states, NEUTRAPEN "...may be of great benefit, and may be given intravenously as well as intramuscularly. With rapid inactivation of the offending antigen followed by supportive therapy...it is felt that many or all of these patients could be salvaged. For this

reason, and from these studies, penicillinase [NEUTRAPEN] should be kept on hand in every doctor's office or hospital where penicillin is administered."⁴

indications Therapeutic: NEUTRAPEN is indicated in all cases of penicillin reaction except the immediate type of anaphylactic reaction.

Prophylactic: When drugs and vaccines (notably poliomyelitis vaccine) which contain small amounts of penicillin are given, it is recommended that NEUTRAPEN be administered concurrently to patients (1) who are known to be sensitive to penicillin, and (2) who have a history of allergy.

Differential Diagnosis: In summarizing his experiences with NEUTRAPEN, Zimmerman suggests that its "...response may be considered a useful tool in the differential diagnosis of eruptions where penicillin is only one of several possible inciting allergens."³

dosage and administration NEUTRAPEN, 800,000 units I. M., injected as soon as possible after symptoms of penicillin reaction appear. If necessary, dosage may be repeated at 3-day to 4-day intervals. In anaphylactic reactions 800,000 units should be given intravenously as soon as possible and immediately followed by 800,000 units intramuscularly.

contraindications and side effects No specific contraindications. Some soreness at the site of injection, which may be accompanied by erythema and local edema, may be noted in some patients, but it is transient and not serious. The intravenous use of penicillinase has been reported to cause chills and fever in some cases.

supplied NEUTRAPEN is supplied in single-dose vials containing 800,000 units of purified injectable penicillinase as lyophilized powder. It is stable at room temperature in the dry state.

references: (1) Becker, R. M.: *New England J. Med.* 254:952, 1956. (2) Chen, J. Y. P.; Bard, J. W., and Balisio, A. A.: *Antibiotics Symposium*, Oct. 3, 1957. In press. (3) Zimmerman, M. C.: *Antibiotics Symposium*, Oct. 3, 1957. In press. (4) Becker, R. M.: 106th Ann. Meet., A.M.A., New York, N. Y., June 5, 1957. (5) Becker, R. M.: *Antibiotics Symposium*, Oct. 3, 1957. In press. (6) Minno, A. M., and Davis, G. M.: *J.A.M.A.* 165:222, 1957. (7) Davis, G. M.: *Discussion, Antibiotics Symposium*, Oct 3, 1957.

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One of the problems in connection with proximate cause is separating the results of the defendant's negligence from the ordinary or unavoidable consequence of the plaintiff's condition.

Thus in *Smith v. Beard* (previously mentioned), plaintiff failed to sustain her burden of proving causation by not showing the probability of better results had the delay in skin-grafting not occurred or a different course of treatment been followed.

Expert evidence

The general rule is that expert evidence is essential to support an action for malpractice. In a recent New York case,¹⁴ plaintiff, a fashion

model, engaged the defendant, a plastic surgeon, to remove a mark which had been placed on her arm while in a Nazi concentration camp. According to the plaintiff, defendant represented that only a thin stripe would be left after removal of the mark, not the unsightly scar which was in fact left.

Defendant denied any such representations, and, in addition, testified that the operation was performed in accordance with the proper and approved practice. In this, defendant was supported by an eminent plastic surgeon and professor in that subject.

Testifying on plaintiff's behalf were two doctors with no experience in the field of surgery. After a re-



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Reference: 1. J.A.M.A. 158:386 (June 4) 1955.

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March 1958, Vol. 4, No. 3

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view of the evidence, the court concluded: that the defendant had not made any guarantee regarding the results of the operation, and that plaintiff's evidence was insufficient to establish a lack of due care. On this latter point, the court noted the fact that the two doctors testifying on behalf of the plaintiff had not had experience in the field of surgery, and held that their testimony lacked probative force.

Defense upheld

A similar result was reached in a recent California case,¹⁵ where plaintiff underwent an operation to remove scars from her face and nose, following which an infection developed and her appearance was worse than before.

At the trial, plaintiff introduced no expert testimony while defendant testified that he used a recognized and approved method of practice, and that the infection was not due to negligence. Judgment for the defendant was upheld, the court stating, "generally the propriety or impropriety of particular medical treatment can be established only by expert medical testimony."

The court also rejected plaintiff's contention that the doctrine of *res ipsa loquitur* should have been applied, explaining that that doctrine applies only when it follows as a matter of common knowledge from the nature of the injury that the result would not have happened without carelessness or negligence.

This can be distinguished from *Soest v. Balsinger* (previously mentioned) in that there was no evidence here of a dirty field of operation or that an unsterile instrument was used.

Breach of contract

There is a class of cases which are not based on negligence but breach of defendant's contract to achieve a particular result. A physician, who was to perform a skin-grafting operation to remove scar tissue from a patient's hand, assured him "a perfect hand 100 per cent good," and was sued for breach of warranty for failing to effect the promised result.¹⁶

The physician contended his assurance of a perfect hand was not intended and should not be construed as a warranty, but the court pointed to the evidence that he had repeatedly solicited the opportunity to perform the operation, and thus the warranty could be taken at its face value as an inducement to obtain plaintiff's consent to the operation. The jury brought in a verdict for \$3,000.

The appellate court ordered a new trial, however, because the lower court's instructions to the jury on the question of damages were erroneous. The trial court had said plaintiff was entitled to recover for pain and suffering, whereas the correct measure of damages should have been the difference between the value of the hand which the defend-

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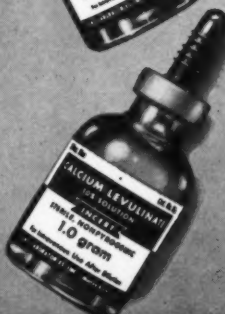
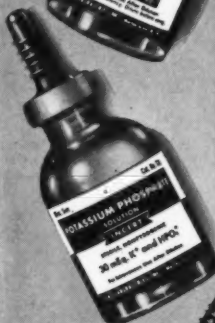
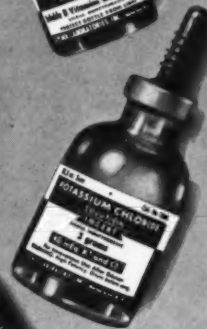
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ant promised and the one which actually resulted from the operation. (Defendant eventually settled out of court for \$1400.)

In a New York case¹⁷ plaintiff brought suit against a plastic surgeon, alleging that, in violation of his contract to remove certain markings from the plaintiff's face, defendant had performed various operations which resulted in extensive scars, discolorations, and twitching about the mouth.

Defendant claimed the twitching was a nervous habit, and that although a cutting of the motor nerve

might result in paralysis, it could not cause a twitch. On appeal, judgment for the plaintiff was reversed, the court holding that since there was no evidence to prove a causal relation between the operation and the subsequent twitching, the twitching should not have been submitted to the jury for consideration as an item of damage.

In a similar fact situation the patient sued for malpractice, but when that action was dismissed, brought a suit for breach of contract. Judgment was for the plaintiff for \$1,000.¹⁸

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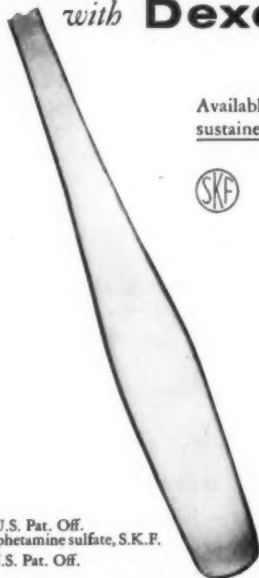
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Getting Ready for Military Service

A little advance planning will help you make the transition with less strain. Here's a preview of what happens when Uncle Sam points a finger at you.

The draft is still a going concern.

And nobody needs to tell you that many residents are going to spend some time in the military. Perhaps you will be one of them.

So here are a few items to keep in mind while awaiting the call—things to do now to get ready, and some advice to help you get the most out of your in-service experience.

Get set

Before you pack up to go into the service, you'd be wise to get a letter from the hospital in which you are currently a resident. Ask your chief of service about this. The letter should contain:

1. A statement to the effect that you've performed your hospital services in a satisfactory manner.
2. A statement that you are wel-

come to return at the same level—or higher level—following completion of your armed forces service.

3. The amount of time you spent in the hospital—even as little as two or three months is significant.

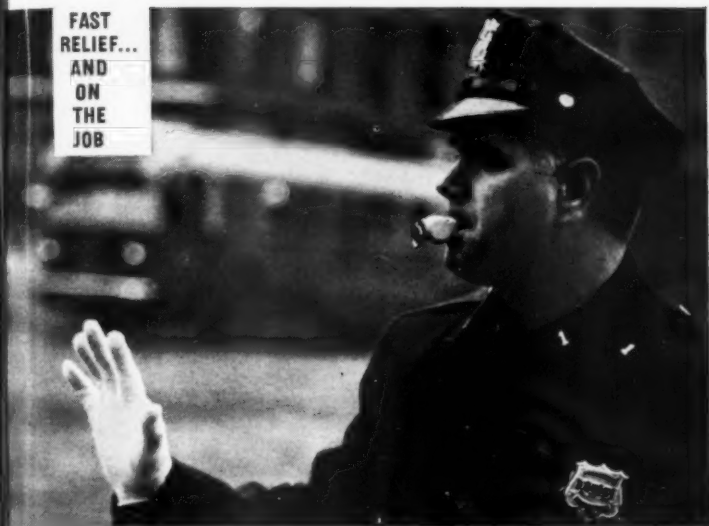
Next notify the following that you are going into service and either give them an address or ask them to hold any material for you until you inform them of your permanent military address:

1. Specialty board
2. Medical journals and other publishers
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Indoctrination

In all services, medical officers receive an indoctrination course (varying from six to twelve weeks) be-

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fore going to a permanent assignment. This training course covers military procedures, military medicine, and an orientation in service life. There are formal lectures, demonstrations, and possibly field trips.

A big question for you as a brand new medical officer is whether or not to take your wife and children to this first and temporary assignment. Although housing is limited at most indoctrination centers, if your wife would enjoy "roughing it" for a bit, it can be an enjoyable vacation period. Motels are usually available; prices are from \$5 to \$10 per couple per day. And there are often good restaurants and excellent entertainment facilities near these indoctrination bases.

Let's put it this way: The indoctrination course itself is easy. There is no homework necessary and hours are generally nine to five. You are off at least one and a half and sometimes two days on the weekend.

Also, since this may be the first time away from home with your wife since you started your residency, here's your opportunity for an inexpensive second honeymoon.

Most young resident couples have a wonderful time seeing the country, taking weekend trips, and living it up in general. So, if there are no babes in arms, don't hesitate to take your wife with you.

Next assignment

Don't be too quick to give up your old apartment. You may be sent



overseas for a while and you will want your wife to have some place to stay until she can join you.

Moving

Supposing you get a permanent assignment in the U.S.—or "state-side" as it's called. In this happy event, your wife can go directly there from the indoctrination center. And, if you've been smart enough to leave a key to your pre-service apartment with a friend or relative, you don't even have to bother going back home for your furniture and so forth.

Movers and packers, completely bonded, will do a fine job of getting

—Continued on page 204

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Barbiturates (such as Abbott's NEMBUTAL®) have long dominated the field of hypnotic-sedatives, with outstanding results.

Yet we must affirm that no single product can be a panacea for all conditions of insomnia and tension. Physicians have particularly needed a mild hypnotic-sedative for those patients with whom barbiturates may not be justified.

PLACIDYL is the outcome of a long and deliberate search for such a drug.

PLACIDYL was finally evolved when a research team working

on the problem turned their attention to acetylenic carbinols. These compounds produced a good hypnotic effect in experimental animals. Then the happy discovery was made that by adding a chlorine atom, hypnotic activity could be markedly increased. Yet there was no evidence of toxicity to the liver, kidneys, or blood-forming elements.

The result is PLACIDYL—generically entitled *ethchlorvynol*, Abbott—and structurally different from any other product on the market.

In nighttime dosage, PLACIDYL

L: the hypnotic-sedative that
nudges your patient to sleep
.....

relieves simple insomnia. Yet it is not soporific. Where most profound hypnotics bluntly *impose* sleep, PLACIDYL *induces* it. Where some compounds emphasize potency and speed, we point out that PLACIDYL simply nudges your patient to sleep.
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Patient should sleep soundly all night,
but direct effect lasts about 5 hours.

In daytime dosage, PLACIDYL permits mild tranquilization without hampering the patient's performance on his job. Its muscle relaxant properties are an added advantage in the tension states.

With approved dosage, side effects in general (including complaints of gastric irritation) have been negligible. And because PLACIDYL's effect disappears after about five hours, hangover is almost never a problem.

We invite you to use PLACIDYL in your practice soon and observe its helpful effect on your patients. **Abbott**

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- 1** You are, of course, a physician. But in the service you will carry the rank of officer. This adds to your obligations. Since you will associate strictly with officers, act like one. One of the responsibilities of an officer is to look the part. Dress neatly and in proper uniform — *all the time*. This is a quick way to gain the respect and cooperation of officers and enlisted men in your group.
- 2** Since your contacts with enlisted men will be on a medical basis, keep your attitude professional, not buddy-buddy.
- 3** Many young military doctors make the mistake of treating sick call as a daily convention of malingerers. True, many who come to you with minor complaints are looking to get out of a day's work. Most are not. You'll soon get to recognize the chronics. Let them know you aren't running a resort.
- 4** There are three ways to act toward enlisted men: too soft, too tough, and the "proper" way—which falls somewhere in between. As a military doctor you aren't expected to be a disciplinarian, so don't make it hard on yourself by trying. Whatever you do, don't act like a top sergeant or a rear admiral—you're neither.
- 5** You'll find many excellent nurses and technicians in the services. Take a little time to find out about their attitudes and their efficiency. Then, so there is no misunderstanding, let them know what you *expect*, what you *demand*, and what you'd *appreciate*. There a difference and it's only fair that they know where you stand on things.

—Continued on page 206

NEW...

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management
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anorectal disorders**

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*Rectal Suppositories with Hydrocortisone,
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**hydrocortisone to reduce
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March 1958, Vol. 4, No. 3

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your stuff out to your new station or base. All they need is a key to get in and they will pack everything including the kitchen disposal—and move it right to your new address.

An important fact: Try to wire ahead to the billeting officer or call him personally. You may be able to get the guest house for a couple of days or an opening on the base.

Once there, take a few days to calm down and look over the area. Don't take the first place available. Live in a motel or guest house and perhaps pay high rent for a week or so. Remember, you are going to be there for a long time and you will want something decent. So don't make the mistake of grabbing the first apartment you hear about and signing a long-term lease. Most commanding officers will give you a few days to scout around and get settled.

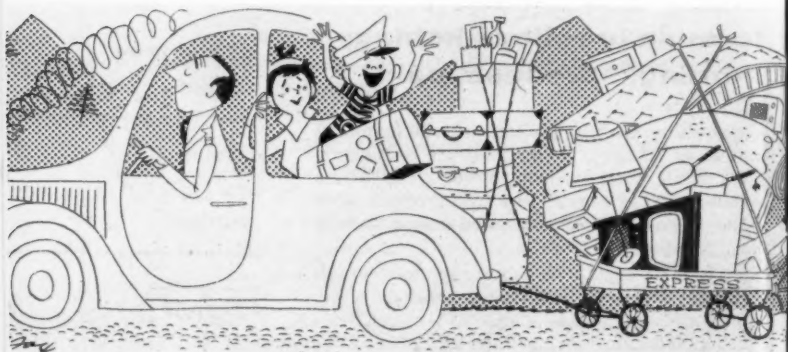
Uniforms

As far as your uniforms are con-

cerned—buy only one outfit, just so you'll be able to report in uniform. Don't go into hock for a complete wardrobe of service clothing. You can always buy everything you'll require at the post exchange or ship's store once you're located—it'll be cheaper this way, too. Remember, in a few weeks you may find yourself slated for tropical or arctic duty. So wait until you know what you'll need before you load up with everything including a ceremonial sword.

Transportation

Take your car? Yes—if you have one. (If you haven't, don't expect to con one from the officer in charge of the transportation pool.) There is usually lots of traveling in service. Most army and navy bases are outside city areas, and on nights and weekends, a car is practically a must to get around. If you get permanent duty stateside, you'll want a car. Also, if you move from one



just so
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m one

base to another you can save a lot of money by taking your family with you rather than have them travel by commercial aircraft or train.

Finances

Although they try to get your uniform allowance and your travel pay to you as soon as you arrive at your first station, sometimes there's a delay. Often you can get an advance to help with your expenses until you get your first pay check. It is best however to have funds for at least thirty days.

How soon your wife can join you depends upon the area overseas you are going to. Some areas, almost immediately and some, if housing is limited, will take longer. The entire matter depends on the availability of government approved housing.

Service pay is excellent (compared with a resident's salary) and there will be a good chance to save.

You will get a thirty-day vacation

period for each year of service. Remember, on your last day in service, you will be paid for any vacation days not used, plus your regular monthly pay check, a bonus and travel pay to your home. This can total \$1,000 or \$1,500 and could help considerably in your first months of private practice or for continuation of residency.

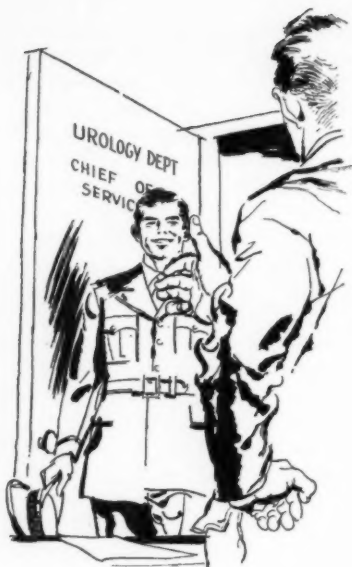
Keep records

Keep a record of your stations and type of medical work performed; a regular form for this can be obtained from your commanding officer. Get the names and addresses of all consultants and chiefs of service. If you want specialty board credit, it will be necessary to get the names and addresses of people who have witnessed your work.

Working hours

Your hours of service will vary. The straight service day is from





eight to five daily with half a day on Saturday. You will be pulling Officer of the Day (O.D.) depending on your specialty and the size of the hospital installation. There are two types of O.D., surgical and medical. (A third, administrative O.D., is usually assigned to medical service corps officers.) You will be assigned O.D. one night out of five to one out of ten. If you are a surgeon, O.D. may be one in two up to one in five nights, depending on the size of the hospital.

At a smaller base with fewer medical officers, you will pull O.D. more frequently. But there will be fewer

personnel and the work involved will be less.

Educational facilities are excellent. There's always some school the services want to push you into.

Of course, this "push" is directed mostly to regulars, not the two-year reservists. You can learn anything from food inspection to the latest techniques in pathology. Take advantage of these courses. You may not get residency credit for them, but they will definitely add to your educational background.

Ready to come home

Six months prior to your discharge, start making your arrangements to continue residency. A letter to your former residency hospital (with a reminder of their offer to take you back) should settle the matter. However, if they have no

Hospital Letter

If you intend to pick up your residency in your former hospital, get the ball rolling early. Working through your former chief of service you should try to have written confirmation of your reappointment to the house staff months in advance. This will make it possible for you to have your household goods shipped ahead of you, avoiding the long delays which often occur.

opening, get busy writing to other hospitals.

Since other residents are going into service all the time, chances are good that you'll be able to move into a vacant spot without too much trouble.

But don't wait until your last service day to find out.

Military asset

The biggest asset of military service is the feeling it should give you of a debt partially paid back. As one resident put it: "We all owe this nation far more than we can ever repay — but serving in our

armed forces is one way to try."

If a resident goes into the service with a chip on his shoulder, he'll have a lot of company. But it's pretty obvious he'll be cheating not only his Government, but himself as well.

Your military tour can be enjoyable and profitable from many points of view . . . so leave your gripes at home. Work hard to meet the high standards of medical service in the armed forces.

In this way, you'll learn a lot. You'll also be able to look back on your tour of duty with pride instead of regret.

when anxiety and tension "erupts" in the G. I. tract...

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RP REVIEWS
BOOKS

About **Doctors**

Conducted by SAUL A. KUCHINSKY

THE LAST ANGRY MAN. *Green, Gerald.* N. Y. Scribners, 1957. \$4.50.

This latest best-seller about a doctor is a fast-paced story of an embattled GP in the jungle of his practice in a Brooklyn, N. Y., slum. Its author, TV executive, former newspaperman and son of a doctor, has given us a frightful picture of juvenile gangs, thankless patients, self-aggrandizing physicians and, in general, a world where "Everybody pushes and shoves . . . everybody is pushing somebody or something."

Dr. Samuel Abelman is the GP, sensitive, torn by hate and love for his slum-bound clientele, sworn enemy of neoplasms in humans and corn-borers in his garden, perpetually and over-valetantly at war with "the haggling, the ingrates, the cheats." His slogan — "The bastards won't let you live."

We learn who the "bastards" are soon enough and are enraged by them ourselves to the very moment Dr. A drops of a coronary. They are the parents of his next-door physician-rival; they dump garbage in his backyard garden and buttonhole his patients on the street with the

warning that Dr. A will surely kill them. They are the alcoholic and the drug-addicted hoodlums of the neighborhood who rape, steal, mug, slash tires, slug old nightwatchmen and defy the world. "I no minority," their leader, Josh the Dill, tells a reform-minded cop, "you afraid of me. I the majority." They are the slum-dwellers dying of influenza who throw their slops out of tenement windows and into the street, plead for treatment but don't pay the bill. They are the opportunist, a brilliant surgeon who promises Dr. A a hospital appointment and appoints another. They are the TV people who build a presumably inspirational program around him for their own mercenary purposes.

And we learn, too, why men practice medicine in the slums or anywhere. "Medicine is one of the few places where nothing you do is ever a waste, a drain, a bore. You can stay in general practice in one small village all your life . . . and each day will present a new prospect, new things to learn, new gifts to impart to people. It's the difference between being a spectator and a participant."

The pace of the book is fast, the language racy. Characterization and situation have the feel of life. If to some Brooklyn doctors there is identification with the real doctors behind the fictional representations, all doctor readers have in "Angry Man" a stimulating book they won't put down for long.



TRICHOMONIASIS TOUCHÉ

In persistent vaginal trichomoniasis of the wife, clinical investigators are unanimous in placing the husband first among possible exogenous sources of re-infection.¹ About 39 to 47 per cent of persistent cases are believed to be re-infections from the sexual partner.²

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1. Rogers, G. C., and Fleming, J. M.: *Am. J. Obst. & Gynec.* 68:563 (Aug.) 1954. 2. Karnaky, K. J.: *Urol. & Cutan. Rev.* 48:812 (Nov.) 1938.

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Mediquiz



Questions 1 through 5 are to be answered after consideration of the facts presented in Case A:

Case A:

A 39-year-old policeman was admitted to a hospital for observation. He was brought in following a verbal altercation with his desk sergeant. He had reported late for duty and when he tried to explain his tardiness, he claimed the sergeant became abusive. He was held at the precinct for examination by the police psychiatrist who had been seeing this policeman at weekly intervals for several months. After examination, the psychiatrist recommended that the policeman be hospitalized. In the psychiatric hospital the patient claimed that his promotion on the force was being blocked because of his religious affiliations. He also felt that the police psychia-

Questions are from a civil service examination given to candidates for physician appointments in municipal government.

Answers on page 218.

trist who had been following him wanted him hospitalized to "get him out of the way." He was suspicious of his co-workers. Past history revealed that he had finished school in his late teens and joined the Navy. After several years of service he joined the police force. His record on the police force had shown only two minor infractions of the rules for which he had been fined. When the war began he rejoined the Navy and had four years of creditable service. While in the Navy, he was hospitalized for four months and given a medical discharge because of "emotional trouble."

He was reinstated on the police force and had "easy duty" since. His mental examination showed him to be oriented. His intellectual resources were normal. He showed a tendency to unwarranted suspicion and this extended even to his domestic life in which he accused his wife of infidelity. Actually, his wife was a devoted, sincere person. No discussion could dissuade him of his erroneous ideas.

1. The one of the following which

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would help most in making a diagnosis in Case A is: (A) electroencephalographic test; (B) examination of the spinal fluid; (C) Binet-Simon intelligence test; (D) Rorschach test.

2. The one of the following diagnoses which would be the most probable from the data given in Case A is: (A) ~~paranoid~~ psychosis; (B) anxiety state; (C) psychopathic personality; (D) alcoholic hallucinations.

3. In Case A, if the diagnosis was alcoholic hallucinations, the one of the following which you would not expect to find is: (A) tenderness of the calf; (B) tenderness of the sole; (C) ~~positive~~ Babinski sign; (D) loss of position sensation in the feet.

4. If the diagnosis in Case A was psychopathic personality, the course most frequently to occur would be: (A) episodes of severe depression with intermittent elation; (B) development of gross paralysis; (C) progressive deterioration of intellectual ability; (D) ~~continuing~~ asocial and amoral behavior.

5. If the diagnosis in Case A was paranoid psychosis, the most frequent trait to be watched for is: (A) ~~assaultive~~ behavior; (B) burglary; (C) convulsions; (D) hemiplegia.

6. Sigmoidoscopic examination of a

patient complaining of chronic diarrhea with mucus and blood reveals ulcerations varying in size from a pin head to an inch in diameter. The larger ulcers have rolled hyperemic margins and undermined edges, so-called flask-shaped ulcers, which extend to the submucosa. They are usually covered with a yellowish or greenish black slough. These ulcers are insensitive to pain when scraped. There are intervening patches of mucosa membrane, quite normal in appearance. Of the following, this picture is usually seen in: (A) bacillary dysentery; (B) non-specific ulcerative colitis; (C) tuberculosis colitis; (D) amebic dysentery.

7. An obese woman of forty with a history of recurrent dyspepsia is suddenly seized with severe epigastric pain radiating to chest and back, and severe vomiting. She goes into a shock-like state, with grayish cyanosis. The major physical finding is a board-like rigidity of the upper abdomen. Blood examination shows a polymorphonuclear leucocytosis, hemoconcentration, and an amylase (Somogyi method) of 860. The logical diagnosis is: (A) acute coronary occlusion; (B) acute pancreatitis; (C) ruptured peptic ulcer; (D) acute cholecystitis with cholelithiasis.

8. Blumer's shelf is: (A) a stricture of the rectum due to lymphogranuloma venereum; (B) an abnor-

ic diar- reveals from a ameter. led hy- rmined ulcers, a. They yellowish These n when evening e, quite the fol- ly seen y; (B) s; (C) amebic ty with epsia is re epi- est and he goes h gray- physical idity of xamina- nuclea- ion, and (mod) of is: (A) (B) acute peptic tis with a stric- lympho- n abnor- Physician

mal dilation of the rectal ampulla; (C) carcinoma of the anterior rectal wall; (D) a malignant infiltration of the pelvic floor between the anterior rectal wall and the bladder uterus.

9. Carcinoid or Argentaffin tumors are most commonly found in: (A) stomach; (B) small intestine; (C) colon; (D) rectum.

10. Recent work has shown that immediate treatment of acute follicular tonsilitis with penicillin is indicated because it: (A) has reduced incidence of subsequent rheumatic fever in such patients; (B) alleviates pain rapidly; (C) prevents laryngeal obstruction; (D) eliminates the splenomegaly frequently found with tonsilitis.

11. Of the following disorders, the one which usually must be reported in writing to the local department of health within 24 hours after diagnosis is: (A) infectious mononucleosis; (B) roseola infection; (C) carbon tetrachloride poisoning; (D) mycosis fungoides.

12. During the active period of poliomyelitis, the causative virus has been most regularly isolated from the: (A) urine; (B) spinal fluid; (C) blood; (D) stool.

13. Among the rickettsial diseases, an initial lesion (eschar) is most commonly observed in: (A) en-



while your patient
sleeps

agoral

works

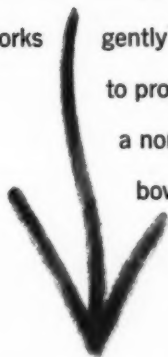
gently overnight

to produce

a normal

bowel movement

in the morning



Dosage: One tablespoonful at bedtime

WARNER-CHILCOTT

demic typhus fever; (B) Rocky Mountain spotted fever; (C) rickettsial pox; (D) Brill's disease.

14. Right bundle branch block is invariably a sign of: (A) heart disease; (B) abnormal conduction through the right branch of the bundle of His; (C) interauricular septal defect; (D) right ventricular hypertrophy.

15. A diastolic apical murmur associated with a diastolic aortic murmur in the presence of only left ventricular enlargement suggests organic deformity of: (A) the aorta; (B) both aortic and mitral valves; (C) only aortic valve; (D) the chordae tendineae.

16. A pericardial friction rub associated with precordial pain and tachycardia is due to pericarditis alone and not to a myocardial infarction if the electrocardiogram shows: (A) elevated ST segments in all three standard leads and no abnormal Q waves; (B) elevated ST segments and a large Q wave in lead I and a depressed ST segment in lead III; (C) the PR interval is prolonged; (D) the QT interval is prolonged.

17. Rheumatoid spondylitis (ankylosing spondylitis, Marie-Strumpell disease) is most commonly encountered among: (A) policewomen; (B) male patients past 50 years of age; (C) physically active males

between 20 and 30 years of age; (D) elderly persons of both sexes.

18. For patients with chronic rheumatoid arthritis, removal of "foci of infection" is: (A) of no importance; (B) seldom helpful; (C) the first appropriate treatment to be considered; (D) consistently beneficial.

19. Osteoarthritis is properly treated by: (A) physical therapy and analgesics; (B) vaccines; (C) antibiotics; (D) gold salts.

20. Of the following, the one not associated with hypoparathyroidism is: (A) muscle cramps; (B) high serum phosphorus; (C) cataracts; (D) renal calculi.

21. Lysozyme titre determination is a laboratory procedure of value in: (A) rheumatoid arthritis; (B) ulcerative colitis activity; (C) sarcoidosis; (D) periarteritis nodosa.

22. The presence of a "Blumer" shelf is determined by: (A) flat plate x-ray of abdomen; (B) digital examination of rectum; (C) use of Miller Abbott tube; (D) abdominal palpation.

23. A rising titre of heterophile antibodies is most characteristic of: (A) infectious mononucleosis; (B) dengue fever; (C) measles; (D) rheumatoid arthritis.

24. The blood sugar fails to rise

normally during an oral glucose tolerance test in: (A) sprue; (B) renal diabetes; (C) ulcerative colitis; (D) hypothyroidism

25. A young person with a classical gastric ulcer history and a negative physical examination who responds to atropine and phenobarbital with complete remission of symptoms should next have: (A) a psychiatric evaluation; (B) serum amylase; (C) x-ray of upper gastrointestinal tract; (D) gastroscopy.

26. After discontinuance of cortisone used for a prolonged period in the management of rheumatoid arthritis, the antirheumatic benefits:

(A) always persist indefinitely; (B) promptly disappear in the majority of cases; (C) very slowly disappear in all cases; (D) will not recur with subsequent use.

27. Carcinoma of the testicle seems to occur most commonly in: (A) atrophic testis following mumps; (B) a testis which descended into scrotum at puberty; (C) abdominal ectopic testis; (D) a testis associated with a scrotal hernia.

28. A 50-year-old man with proven pneumococcal pneumonia had a good initial response to penicillin therapy but, four weeks after onset of pneumonia, a segment of the in-

when anxiety and tension "erupts" in the G. I. tract...

IN ILEITIS



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volved lobe remains consolidated and some fever and cough persist. Of the following, the course of action which should be followed is to: (A) give patient a course of aureomycin; (B) test pneumococci from patient to see if they are resistant to penicillin; (C) bronchoscope patient.

29. Pruritus is most notable in: (A) hemolytic jaundice; (B) acute yellow atrophy; (C) cholangitic hepatitis; (D) Weil's disease.

30. Among the bacterial endocarditis, the species of causative organisms most prone to develop resistance to penicillin is: (A) hemolytic streptococcus; (B) staphylococcus aureus; (C) streptococcus viridans; (D) pneumococcus.

31. A recently-married young man who collapses in the bathroom following the passage of tarry stools is most likely to be suffering from: (A) esophageal varices; (B) carcinoma of hepatic flexure; (C) hereditary familial telangiectasia; (D) bleeding peptic ulcer.

"MEDIQUIZ" ANSWERS

1(D), 2(A), 3(C), 4(D), 5(A), 6(D), 7(B), 8(D), 9(B), 10(A), 11(C), 12(D), 13(C), 14(B), 15(C), 16(A), 17(C), 18(B), 19(A), 20(D), 21(B), 22(B), 23(A), 24(A), 25(C), 26(B), 27(C), 28(C), 29(C), 30(B), 31(D).



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RESIDENT RELAXER

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VIEWBOX DIAGNOSIS

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COOLEY'S ANEMIA

Note marked widening of the diploe, mainly in the frontal and parietal regions, due to increased medullary activity (hypermedullosis).